

Makers of Over 70% of U.S. Gasoline Reject MMT Use

As reported in the March *EDF Letter*, EDF and 36 other environmental, medical, religious, and consumer groups asked U.S. oil refiners not to use Ethyl Corporation's new manganese-based gasoline additive MMT, marketed to refiners under the trade name HiTEC 3000. In response, 15 oil companies—Amoco, Anchor, ARCO, BP, Chevron, Conoco, Exxon, Hess, Marathon Oil, Mobil, Pennzoil, Phillips, Shell, Sun, and Texaco—have written to EDF, confirming that they are not currently using MMT.

Among the 36 groups joining EDF on this issue are the American Psychological Association, Center for Auto Safety, League of Conservation Voters, National Wildlife Federation, Natural Resources Defense Council, Parkinson's Action Network, and the Society for Developmental and Behavioral Pediatrics.

Meanwhile, the American Automobile Manufacturers Association has adopted new specifications for U.S. gasoline that would



Greg Dearth

Gasoline containing Ethyl's lead-based additive was for many years the largest source of human exposure to lead, a substance long-known to be toxic. Although leaded gas use was curbed in the 1970's, its health effects are still being felt.

preclude MMT use. According to the Association, MMT harms automotive systems. General Motors has advised new car owners that using gasoline with MMT may impair emission control systems.

The toxic effects in humans of high levels of airborne manganese—including severe and progressive brain degeneration—are well documented. Little is known, however, about low-dose exposure, chronic toxicity, or age-related susceptibility.

The U.S. Environmental Protection Agency (EPA) originally denied Ethyl's request to sell MMT, based on health concerns. The courts, however, compelled EPA to allow MMT sales, ruling—in a lawsuit filed by Ethyl—that EPA lacked authority to consider MMT's health effects until it was on the market. EPA administrator Carol Browner has since asked the petroleum industry to voluntarily label gasoline containing MMT at the pump, so consumers can make an informed choice.

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Groups Target North Carolina Hog Farm Pollution

Five major spills from North Carolina hog farms in less than a year have killed more than 10 million fish, closed nearly 365,000 acres of coastal wetlands to shellfish harvesting, and interrupted other commercial fishing. Hundreds more hog waste holding ponds—or lagoons—are reported to be in danger of collapse. Most of the state's hog production occurs in coastal watersheds already degraded by water pollution.

EDF and several other national, regional, state, and local environmental and citizens' groups are calling for action to rein in hog industry pollution, arguing that the industry's rapid growth has outstripped North Carolina's ability to deal with the impacts. The coalition presented its recom-



Robert Willert

The rapid growth of hog farming in North Carolina is outstripping the state's ability to deal with its impacts on the environment.

mendations at a "hog summit" attended by more than 400 people representing a wide range of interests from across the state. North Carolina's attorney general, several state legislators, U.S. Rep. Charles Rose III, and Steven J. Levitas, a former EDF attorney who is now Deputy Secretary of the Department of Environment, Health, and Natural Resources, spoke at the conference.

More Pigs Than People

Almost all of the increase in U.S. hog production in the past ten years took place in North Carolina, whose hog industry quadrupled in size in that period—to some 8.3 million hogs at the end of 1995. (The

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People allergic to Brazil nuts could have had a reaction—to bioengineered soybeans! EDF continues to call for broader labeling of such foods.

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EDF Trustee Frank Taplin is a true Renaissance man.

7 Seeing The Forest, Not Just The Trees

Working with private landowners, EDF is spotlighting new markets for non-wood forest products.

Honorary Trustee Amyas Ames has written to EDF about his efforts to limit the use of fertilizer and grass-cutting machinery.

Dear EDF:

A few years ago, I plowed and raked one-tenth of an acre (22 paces by 22 paces) of my meadow and planted it with perennial



Amyas Ames

wildflower seed. The seed proved very fertile. The perennial flowers, mostly daisy, coreopsis, lupine, black-eyed susan, cornflower, foxglove, and goldenrod, change constantly as the weeks of the season pass.

Such a natural area on your land becomes the easiest to care for. The basic "wildflower rule" applies: "cut only once a year in spring." Flowers come up every year without fertilizer or any attention except the spring cutting. Butterflies of many varieties, birds, bees, and meadow voles are drawn to the meadow as to an oasis of life in the great "desert" of closely mowed suburban lawns.

*Amyas Ames
Syosset, NY*

Dear EDF:

I just had to write and compliment you on a fantastic World Wide Web site (www.edf.org). I've been an EDF member for years now, and a "Net Surfer" for nearly as long. I was very impressed with how complete your new site is—I've already recommended your impressive Earth to Kids section to a friend with children.

*Alicia Williams
Navarre, FL*

Write to Us! We welcome member comments. Write to MAILBAG, EDF Letter, 257 Park Avenue South, New York, NY 10010. (Or fax us at 212-505-2375, or send e-mail to members@edf.org via the Internet.) Letters may be edited for brevity and clarity.

New Group, 'Friends of Nature,' is Thriving in China

Founded just two years ago, "Friends of Nature," China's first non-governmental organization dedicated to the environment, has already had an impact on public policy. The group's founder—Liang Congjie—profiled in EDF Letter in March 1995—reports that FON established a children's educational camp last summer in an old-growth forest in northeast China. In January, it triggered media and governmental attention that helped delay logging of another old-growth forest in southwest China, the habitat of 200 endangered snub-nosed monkeys. FON hopes alternative income sources for the area can be found.

Friends of Nature, which now has office space in Beijing, is working on several environmental education projects. It is publishing environmental guides for teachers and recently persuaded the Beijing Zoo to give visitors more environmental education materials.

"I want to borrow a corner of your newsletter to convey my gratefulness to the people who have supported us, including the more than 200 from outside China who



Liang Congjie addresses the first meeting ever held to organize a non-governmental environmental group in China. The meeting led to the formation of "Friends of Nature."

wrote to congratulate us on the establishment of Friends of Nature," Liang said. "As China rushes to modernize, awakening an environmental consciousness in the Chinese people is more important than ever."

EDF members can write to Friends of Nature at PO Box 621, Beijing 100010, China, or send e-mail to cjliang@pcux.ied.ac.cn.

Expert on Renewable Energy To Head EDF Energy Program

Karl R. Rábago, a former Texas Public Utility Commissioner and most recently a senior official at the U.S. Department of Energy (DOE), has joined EDF as Program Manager for Energy. Rábago, who joins the staff of the Texas office, will focus on new opportunities for renewable energy and energy efficiency and on the environmental impact of changes in the electric utility industry.



Robert Baumgardner

EDF's energy work began in the 1970's, when electric utilities were traditional regulated monopolies. Now, large customers are seeking to buy electricity from non-utility bidders, and many regulators are trying to bring competition to the industry. Ensuring that competition is both fair and environmentally sustainable is the

challenge facing EDF.

As Deputy Assistant Secretary for Utility Technologies at DOE, Rábago managed utility sector programs in photovoltaics, wind, solar, geothermal, and other renewable energy technologies, electric energy systems, energy efficiency, demand-side management, and integrated resource planning. He previously worked on energy issues in Texas involving customer groups, technology firms, utilities, and state regulators. An attorney, Rábago was a law professor at the University of Houston Law Center and previously served 13 years in the U.S. Army, attaining the rank of major.

EDF Membership Office Now in Washington

EDF members can now receive fast service by contacting the EDF membership staff, under the direction of Laura Gassler, in our Washington office. The special membership phone number is 202-387-3525. E-mail users can write members@edf.org.

Director's Message

Pollution Prevention Pays

Most Americans want to protect the environment. That fact is ignored by "reform" efforts in Congress and state capitals that would weaken environmental protection. We must *strengthen* environmental laws and, where possible, make them more flexible, an idea for which EDF has rallied broad support.



Fred Krupp
Executive Director

This approach was recently endorsed by the President's Council on Sustainable Development (PCSD), a diverse group of business leaders, environmentalists, politicians, and labor and civil rights leaders, on which I served. Brought together to set a direction for our nation's environmental policy, these frequent adversaries hammered out a strong consensus for environmental protection and economic growth. The Council's report calls for tough, *enforceable* health and environmental standards, and allows businesses flexibility to go beyond mere compliance.

EDF has a track record of working effectively with business while advancing ambitious environmental gains. Our Great Printers Project—showcased by PCSD—has created a consolidated, user-friendly reporting process. Energy that was dissipated in a myriad of paperwork is now redirected into a process that shows printers how to innovate with different materials and methods to prevent pollution. EDF is also working with General Motors to integrate pollution prevention into core business practices, such as product design, where the most eco-efficiency can be had. And we're helping companies in an industrial park in the Brownsville-Matamoros area on the Texas-Mexico border to find efficient ways to reduce industrial waste.

All of these projects have a single theme. Pollution and waste are inefficient, and inefficiency is expensive. We will often need a new type of strong but flexible regulation to speed that process. Helping to make businesses less wasteful is good for their bottom line, and, most importantly, for the construction of a sustainable future.

Gene-Altered Food Triggers Allergy

EDF has long called for more extensive labeling of genetically engineered foods, because of a concern that gene-altered foods may cause allergic reactions in susceptible individuals. That concern is now substantiated in a recent article in the *New England Journal of Medicine*, which reports that people allergic to Brazil nuts can have an allergic reaction to soybeans bioengineered to contain a Brazil nut gene.

"People with food allergies depend on labels to avoid foods that cause reactions," said EDF biologist Dr. Rebecca Goldberg, head of EDF's biotechnology program. "Labeling is especially critical for genetically engineered foods, which are modified through proteins produced by the introduced genes. Nearly all known food allergens are proteins.



PhotoDisc, Inc.

Genetically engineered tomatoes, corn, potatoes, and squash are—or soon will be—in grocery stores. Without labels, they will likely be indistinguishable from regular products.

"A person allergic to bananas, for example, can refer to ingredient labels on processed foods to avoid those that contain bananas," Goldberg said. "Unless bioengineered foods are labeled, however, banana-allergic people will be unable to avoid a tomato with a banana gene, since such tomatoes would likely look identical to other tomatoes."

The bioengineered soybeans were developed by the giant seed company, Pioneer Hi-Bred

International, Inc., to have high levels of the amino acid, methionine. The goal was to make nutritious animal feed, but some of the gene-altered beans would enter the human food supply in soybean-based food additives. In response to the evidence, Pioneer has dropped plans to market the soybeans, because it does not want to be responsible for segregating the engineered soybeans from other soybeans.

Good News for Weeds?

In an unrelated study reported the same week, a food crop bioengineered for pesticide resistance was found to transfer its pesticide-resistant trait to weeds growing nearby. This confirmed another concern of EDF's biotechnology program, namely that bioengineered traits could be transferred unintentionally to wild plants, with potentially negative impacts on the environment.

Food allergies such as those in the soybean study are a serious public health problem, affecting 2.5 to 5 million people in the United States, a disproportionate number of whom are young children. Most allergic reactions to food cause only discomfort, but some cause a severe and sometimes fatal reaction called anaphylactic shock.

EDF has urged the Food and Drug Administration (FDA) to protect people with food allergies by requiring labeling of many more genetically engineered foods than FDA now requires. An editorial in the *New England Journal of Medicine* accompanying the research article concurs with this recommendation.

EDF MEMBER ACTION ALERT

To comment on this issue, write: Dr. David Kessler, Commissioner, Food and Drug Administration, 12420 Parklawn Dr., Rockville, MD 20857.

Environmental Patron, Rhoda H. Goldman, Dies

EDF honors Rhoda H. Goldman, a major supporter of environmental protection, who died February 4. She and her husband established the Richard and Rhoda Goldman Fund, which has given millions of dollars in grants to environmental causes, including support for EDF's work to protect San Francisco Bay, to safeguard oceans and fisheries, and to prevent lead poisoning.

The Goldmans also created the prestigious Goldman Environmental Prize to reward grass-roots environmentalists

around the world, and the new Saro-Wiwa Memorial Fund to help protect environmental activists whose lives are threatened because of their activities.

"Rhoda was a careful observer, an acute thinker, and a compassionate spokeswoman," said EDF executive director Fred Krupp. "We at EDF, and the entire environmental community, were lucky to have her on our team. We will miss her vision and inspiring leadership. Our memory of Rhoda will help us continue working for her goals of a just and sustainable future."

Reform of Campaign Financing is Urgently Needed

By Jim Marston and Jim Martin, EDF attorneys in the Texas and Rocky Mountain offices, respectively.

During his last campaign, a senior Western Senator received hundreds of thousands of dollars from businesses that have a vested interest in changing the Endangered Species Act. Last year, the same Senator allowed lobbyists for those businesses to draft a bill that would radically weaken the Act.

The author of the House attack on Superfund took nearly \$45,000 in campaign contributions—about 10% of his 1994 total—from members of Superfund Reform '95, a coalition of industries seeking a drastic rewrite of the law. In 1995, he proposed a bill—opposed by EDF—that would have relaxed many of the Act's cleanup standards and dramatically reduced some companies' financial responsibility for pollution cleanups.

The timber industry gave \$300,000 in the first half of 1995 to members of key Congressional Committees. Many of the recipients subsequently voted to attach to a spending bill the so-called "salvage rider" that has resulted in logging of healthy old-growth forests across the West.

The large sums raised and spent in elections are visibly—and negatively—altering the way Congress addresses important environmental and public health issues. The influence of money on politics is also diminishing the ability of our elected representatives to do their jobs.

In 1994, the average winning candidate for the House of Representatives spent



Jim Marston



Jim Martin

more than \$516,000 for the general election; the average successful Senate candidate spent over \$4.5 million. To build that kind of campaign fund, a House member must raise nearly \$5,000 a week; the average Senator has to raise \$15,000 every week of a six-year term.

The pressure to raise money is intense, unrelenting, and debilitating for both the candidate and the political process. The experience of people who ran as "reformers" in 1994 is revealing. Many of these freshmen—after voting to gut the Clean Water Act, cut EPA's enforcement programs, and tie regulatory agencies up in knots—are now soliciting large contributions from special interest political action committees (PAC's).

Not A Partisan Problem

The problem of money corrupting the political process is not a partisan issue. Huge sums of money, including large amounts from industry groups seeking to weaken environmental laws, flow to whomever is in power. As Josh Goldstein of the Center for Responsive Politics has said, "The campaign finance system rewards those in power, because they can influence the legislative process. They dictate the agenda." More subtly, the influence of money in politics corrodes citizens' confidence in both the process and the outcome.

These facts recently spurred EDF's Board of Trustees to call for reform of our campaign finance laws. The negative influence

of special-interest money on a wide range of EDF issues—both in Washington and at the state level—causes EDF to believe that we need to reform the way U.S. elections are funded. EDF's goal is to blunt the impact of special interest campaign contributions on Congress's deliberations over the environmental health of our nation.

EDF staff are working with other environmental organizations to develop a joint press and legislative strategy on this issue. EDF's own efforts will include traditional analysis to show the link between the so-called "wise use" movement and the extractive industries that have been

We must restore ideas, in place of dollars, as the premier currency in the political arena.

big campaign contributors.

Among the major problems of the current campaign finance system are the influence of large special interest contributions from PAC's and the loopholes in the current law that allow corporate contributions in excess of the legal limit to flow to campaigns through state parties, independent campaigns, and by bundling contributions. Several bills have been introduced to reduce the influence of money on Congressional campaigns, and they deserve support.

The Bipartisan Clean Congress Act of 1995, H.R.2566, addresses a number of problems with the existing campaign finance system. Its principal sponsors are Representatives Linda Smith (R-WA), Christopher Shays (R-CT), Mary Meehan (D-MA) and Ben Cardin (D-MD). The companion Senate bill, S.1219, is spearheaded by Senators John McCain (R-AZ) and Russell Feingold (D-WI). These bills include provisions for voluntary campaign spending limits and discounted broadcast and mailing rates for candidates who agree to limit their spending. They would close some of the more egregious loopholes in the current law. They have drawn the support of groups such as Common Cause, Public Citizen, and the League of Women Voters.

Campaign finance has a powerful influence on how choices about the future health of our children and quality of the environment are made. We need to restore ideas, in place of dollars, as the premier currency in the political arena to insure that the playing field is level and the rules are fair.



Wild animals are some of the victims of anti-environmental legislation financed by special interests. According to a new report, political candidates received \$65 million between 1989 and 1995 from 176 political action committees that are working to weaken the Endangered Species Act.

Huge Project Will Overwhelm Tiny African Nation

Despite evidence of environmental and social harm documented by its own staff, the World Bank continues to fund one of the world's largest water projects—including the highest dam ever built in Africa—in the little mountain kingdom of Lesotho, which is entirely surrounded by South Africa. EDF is working with the International Rivers Network and non-governmental organizations in Lesotho, South Africa, and Europe to pressure the Bank to address the problems the project has already caused—including the loss of livelihood of about 20,000 of Lesotho's poorest inhabitants—before it funds any further work on the dam.

Last August, when the World Bank's new president, James D. Wolfensohn, canceled the Bank's loan for the Arun River dam in Nepal's Himalayan mountains, he said that a project of the size and complexity of the Arun dam would overwhelm a small country like Nepal. Yet in Lesotho the Bank is funding a project that is already far larger than Arun dam in

a country only about one-fifth the size of Nepal, with one-tenth the population and an economy about one-fifth the size.

The main objective of the \$8 billion project is to divert water into South Africa's heartland. Besides the 607-foot-high dam, the first phase includes 50 miles of tunnels and 250 miles of roads. Several more dams, tunnels, and pumping stations will be built in the future. Although water shortages are a serious problem in South Africa, better conservation could increase supplies substantially. Water experts have said that old, leaky pipes lose as much as 50% of the water in the country's industrial area.

Environmental Impacts Unknown

The Bank approved the Lesotho project with no environmental impact assessment. Little is known about native fish and bird populations, how the project might affect them, or impacts of large scale water diversion on river habitats downstream. Traditional local subsistence communities have been severely affected and little

progress has been made on promises to reestablish people's livelihoods.

"No future phases of this project should



Farming and pastoral communities in Lesotho's highlands have lost grazing lands and fields to the water project but have seen few if any benefits.

be built," said EDF economist Korinna Horta, "until the social and environmental problems created so far are adequately resolved and a full environmental impact assessment has shown it to be environmentally, socially, and economically viable and preferable to other alternatives." Horta returns to Lesotho this month.

Ethyl Buys Costly Ads, Not Key Tests of MMT's Effects on Public Health

THE NEW YORK TIMES, THURSDAY, MARCH 7, 1996 A17

Ethyl Corporation wants to remove millions of pounds of smog-related pollutants per year from the environment.

The Environmental Defense Fund prefers that we don't.

Why? That's a very good question...
Rather than presenting the facts and truth to inform the public about Ethyl Corporation's lead additive MMT, the Environmental Defense Fund (EDF) focuses on half-truths and misinformation designed to scare the public. In their most recent misleading campaign, they claim MMT is a health risk. They mix a little fact with a lot of fiction and **deliberately** spread misinformation to the

OK, let's cut to the chase. And the truth.
Manganese is a necessary nutrient for the maintenance of good health. It's found naturally in the air we breathe, the food we eat and the water we drink. The FDA even recommends it as a necessary part of our daily diet. In 1985, the EPA concluded that exposure to manganese is much higher levels than those resulting from the use of MMT **do not** warrant regulation to protect public health.

The 211-million-pound reduction in nitrogen oxides claimed by Ethyl (if MMT were used in every car in America) would amount to 1/2 of 1% of total U.S. NOx emissions, far from justifying an uncontrolled experiment on human health.


Continued from page 1.

"Dispersing a toxic metal into the air without adequate pre-market health testing is irresponsible," said EDF attorney Karen Florini. "Ethyl should suspend marketing MMT until the health studies EPA identified as necessary five years ago are completed. If adequate and independent testing shows MMT to be safe, we wouldn't oppose its use."

"Much of this controversy could have been avoided if Ethyl had done appropriate tests of neurotoxicity, pulmonary function, and reproductive and developmental toxicity for MMT," said EDF toxicologist Dr. Ellen K. Silbergeld. "In 1925, despite

protests from the public health community, Ethyl began selling lead additives for gasoline, with devastating results for the nation's health. Now, 70 years later, Ethyl is again disregarding health concerns and selling MMT without first obtaining adequate toxicity information."

"Fifteen oil companies have taken a strong first step by not using MMT," said EDF executive director Fred Krupp. "Four—Amoco, Anchor, ARCO, and Sunoco—have taken a key second step and promised to notify EDF if they change their plans. All the oil companies should pledge to inform their customers if they change their MMT plans and should commit to labeling gas pumps so consumers will know whether they contain MMT."

THE  SUN

BALTIMORE, THURSDAY, NOVEMBER 12, 1924

Ethylized Gasoline

FOR one year and nine months ethylized gasoline has been on sale. It is now being distributed through about 20,000 filling stations covering one-third of the territory of the United States. About 200,000,000 gallons have been used by more than one million motorists with complete safety and satisfaction. No accidents or ill-effects occurred in an experimental

In 1924, Ethyl took out ads saying, "Exhaustive tests have been conducted which have established the safety of ethylized [leaded] gasoline when used properly as a motor fuel."

Repeating a tactic it used 70 years ago, Ethyl placed ads in major newspapers claiming its product was safe. Ethyl's MMT ads make misleading and incorrect claims such as these:

Ethyl Claim: MMT use would remove millions of pounds of smog-related pollutants from the environment.

Documented Fact: Even if true, the 211-million-pound annual reduction in nitrogen oxides claimed by Ethyl (if MMT were used in all cars) would amount to 1/2 of 1% of total U.S. NOx emissions. In EDF's view, that benefit doesn't come close to justifying marketing MMT without proper health testing. And Ethyl's claimed NOx reductions in Canada have been questioned by the Motor Vehicle Manufacturers Association there.

Ethyl Claim: MMT has been used safely in Canada for 19 years with no health risks.

Documented Fact: No studies of whether MMT causes any health effects have been conducted in Canada—only limited testing of manganese levels in the air.

Ethyl Claim: Manganese is a necessary nutrient.

Documented Fact: True, in low doses, when eaten, but irrelevant to airborne exposures. Manganese is a known neurotoxin that kills brain cells. Breathing it puts it on a fast track to the brain.

Korinna Horta

EDF Trustee Frank Taplin is the Honorary Chairman of EDF's new 21st Century Campaign.

Make no mistake about it: Frank Taplin is an amateur. In music, in poetry, in languages, in the environment, he is driven by his love of learning and of doing. As he could tell you, amateur comes from Latin and French words meaning 'lover.' He is not an unskilled dilettante, as the word sometimes connotes. This is a man who regularly plays piano with professional chamber musicians; whose two volumes of collected doggerel evoke Calvin Trillin; and who, approaching his 81st birthday, has embarked on a study of the Basque language.

Coming from a prominent Cleveland family, Taplin has had the good fortune to be able to do what he wants. Luckily for EDF and for numerous other non-profit institutions, he has chosen to spend the last three decades serving on the boards of organizations he admires, helping them with his vision and his legendary fundraising skills.

"He's the most perspicacious individual philanthropist I have ever known," said Scott McVay, director of the New Jersey-

During four years in the Navy, Taplin found pianos wherever he went. "It didn't matter whether they were in tune or not."

based Geraldine R. Dodge Foundation, who has known Taplin for more than 30 years. "He's a bon vivant, a real intellectual. He's sensitive to the needs of society and responds in a fresh way."

Music is Taplin's great love and has attracted much of his philanthropic attention. Family influence is evident; his mother, Edith Smith Taplin, was devoted to music, the arts, and literature. Around the dinner table, Taplin recalls, "There was always a lot of arguing about the meaning of words and hauling out of the dictionary." He played in dance bands in high school and decided to go to Princeton University after seeing Jimmy Stewart, Joshua Logan, and Jose Ferrer perform in the University's Triangle Club shows.

At Princeton, he played piano and conducted the Triangle orchestra. He found time to study, too, majoring in history (evident during a conversation peppered



Frank Taplin relaxes at the opening of the EDF-American Museum of Natural History exhibition "Global Warming: Understanding the Forecast" at Pittsburgh's Carnegie Science Center.

Richard Kelly

with references to historical figures and events) and going on to Oxford as a Rhodes Scholar. He saw the menace of Hitler up close and volunteered for the Navy as he was finishing law school at Yale. During four years in the Pacific, he found upright pianos wherever he went and, as he puts it, "banged away on them. It didn't matter whether they were in tune or not."

Over 30 Years In Philanthropy

After the war, Taplin returned to Cleveland to become an attorney and then a businessman before going back to Old Nassau to serve as assistant to Princeton President Robert Goheen from 1957 to 1959. He's been engaged primarily in philanthropy ever since, aided ably by his second wife, Peggy.

He helped save the Marlboro School of Music in Vermont, reorganizing the board and building an endowment, and in the process began to earn a reputation for putting faltering arts organizations back on their feet. The Metropolitan Opera was next. With a small endowment and expenses exceeding income, the Met was in trouble in the late 1970's. Taplin became president and CEO and immediately boosted annual giving and began planning a capital campaign to celebrate the Opera's 100th anniversary. Today, the Met has a \$133 million endowment and annual giving of \$60 million.

Shortly after coronary bypass surgery in 1988, Taplin was raring to go again and

decided to shift his philanthropic energies to the environment. Impressed with EDF's solution-oriented approach, he volunteered and became chairman of the steering committee from EDF and the American Museum of Natural History to organize funding for a traveling exhibition on global warming. With a personal style mixing enthusiasm and great knowledge, he secured lead gifts from several individuals to kick off the campaign, which ultimately brought in \$4 million and assured that the exhibition could go forward.

Insurance for the Future

Taplin's brand of philanthropy is about more than money, however. As he says, "I'm always interested in substance, not just the money raising. I try to understand the artistic vision—and then find the resources."

In the case of the global warming exhibition, that meant learning about the science of climate, about the uncertainties inherent in climate projections, and about

He earned a reputation for putting faltering arts organizations back on their feet.

the policy options. "My own feeling is that as an insurance policy, we've got to act now, because there is a lag between the action and the time the consequences become evident." An optimist, Taplin expects that his new great-granddaughter will see great environmental progress in the next century.

Four-fifths of the way to a century himself, Taplin shows no sign of slowing down. He practices on the piano an hour or more a day and still loves playing chamber music with professionals. "It's a wonderful way to learn," he says. "You have to listen all the time to hear exactly what is going on around you."

Taplin sees similarities in playing chamber music and working with boards of directors: trying to realize a shared purpose. "EDF is a shining example of cooperation between a committed volunteer board and a committed professional staff."

By Billy Goodman

Economic Incentives Can Improve Forest Management

The forests that originally covered vast areas of the U.S. harbored an enormous diversity of tree species as well as important native plants and animals. Human activity has radically altered these natural forests and reduced their biodiversity. Large areas of primary forest have been displaced by agriculture or development, others replaced by tree plantations, still others degraded after repeated harvesting of only the most valuable trees.

Although the *volume* of timber in the U.S. is increasing because of intensive cultivation, the total acreage of U.S. forest land continues to decline. The loss of forests is most acute on private lands, where owners often can profit by clearing and selling their land rather than maintaining it.

All these factors threaten surviving natural forests. Longleaf pine forests once covered 70 to 90 million acres of the Southeastern coastal plain; today, less than 3% remain, and that is threatened by fire suppression and conversion to other tree species. Southern bottomland hardwood forests continue to face the risk of being cleared, drained, and converted to other uses. And in the Northwest, only a tiny fraction of the “old-growth” forest survives, and these remaining stands are threatened by current and proposed logging.

Seeing the Forest, Not Just the Trees

EDF has begun a new effort to spotlight the *non-wood* assets provided by forests. Explicitly accounting for these assets will encourage forest owners to preserve forest lands. In addition to recreational and other values, robust markets already exist for such non-wood forest products as wild mushrooms in the Northwest and pine straw in the Southeast.

Human activity has radically altered large areas of natural forest and reduced their once-abundant biodiversity.

An interdisciplinary EDF team is developing market-based incentives and cooperative arrangements with private landowners to protect forests. EDF intends to demonstrate that the economic returns from traditional timber operations can be equaled by the combined economic returns from marketing of non-wood forest products and more environmentally sensitive methods of harvesting and managing forests.

Because traditional lumber and wood-

pulp markets offer the most obvious income opportunities for landowners, owners’ decisions are often dominated by a concern to maximize the volume of wood production. Better information on existing and emerging markets for non-wood prod-



Koii Yamashita



Paul Nurnberg/Lighthawk

When natural forests (left) are cleared and replanted as tree plantations (right), the volume of timber is increased but vital biodiversity is destroyed. EDF is working to show landowners the economic benefits of maintaining natural forests.

ucts can help owners shift from volume-based decisions toward more environmentally beneficial forest management.

Building on Success

The new project builds on several promising recent efforts in which EDF worked with private parties to increase environmental protection of forest lands.

EDF’s successful settlement of a lawsuit against Weyerhaeuser over a North Carolina wetland forest included an agreement by Weyerhaeuser and five other major timber companies to work with EDF to identify rare and imperiled forest areas on their lands and adapt forest management to better protect the areas.

The Paper Task Force, spearheaded by EDF with major corporate paper buyers, studied the impacts of managing forests for paper production and recommended ways to reduce negative impacts. EDF is following up by enlisting additional paper buyers to press their suppliers to adopt the recommendations.

Landowners in the North Carolina Sandhills are voluntarily managing thousands of acres of longleaf pine forests as habitat for endangered red-cockaded woodpeckers under an EDF-designed incentive plan called “Safe Harbor.” Previously, few landowners encouraged nesting by the woodpecker, fearing that tighter regulation of their property would result if more birds

took up residence. Safe Harbor, which has been enthusiastically embraced by the U.S. Fish and Wildlife Service, lets owners manage their land for the woodpeckers’ benefit without incurring additional legal obligation for any newly arrived birds. EDF is

developing other Safe Harbor projects across the country.

In the Northwest, where EDF has promoted water trading as a way to aid salmon and other resources, EDF’s new initiative is seeking to encourage new markets for non-wood forest products and for “environmental values” such as water quality and quantity, carbon dioxide emission reductions, fish and wildlife habitat, and recreation. The goals are to point out alternative income sources for landowners who might otherwise cut down their forests and to identify the beneficiaries of

EDF seeks to identify the benefits of forest conservation and create incentives to reward people who provide them.

environmental values who might pay to help restore clear-cut areas and promote the rapid return of biological diversity to young second-growth forests.

Throughout the EDF forest effort, a common theme is to identify the benefits—economic and ecological—of forest conservation and to create incentives that reward people who provide them. This powerful combination could help ensure expansive and biologically diverse forests into the future.

21st Century Campaign Gifts Help Safeguard Oceans

Recent gifts to EDF's *21st Century Campaign* are helping to advance EDF's efforts to restore and protect the world's oceans and depleted fisheries. The Global Oceans Initiative—one of six programs supported by the campaign—is working with scientists, the fishing industry, and others worldwide. One goal is to establish sensible and realistic catch limits that emphasize long-range economic viability over short-term exploitation.

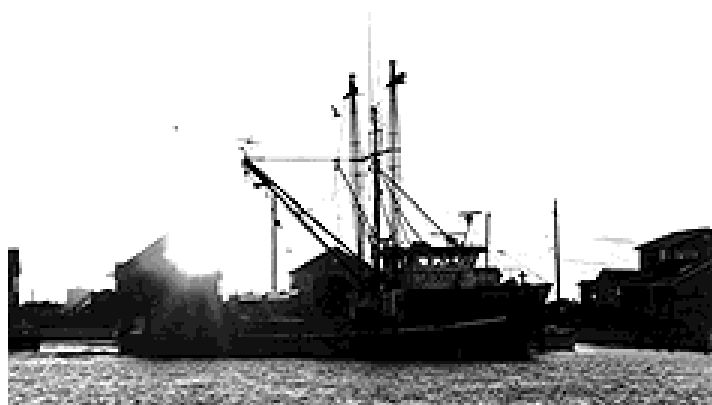


EDF has already been working to protect fisheries in the Pacific Northwest and in New England. In a recent breakthrough, the New England Fishery Management Council approved a new mechanism to rebuild the depleted cod, had-dock, and flounder populations of Georges Bank and the Gulf of Maine. The measure, strongly backed by EDF, will reduce the amount of time boats may fish, close more areas to fishing, and eliminate exemptions for some smaller boats. Also, for the first time, it establishes scientifically based annual targets for total allowable catch.

Gifts and pledges toward the overall Program Fund goal total \$9.5 million to date, including several gifts from individuals and foundations that have launched the oceans project. The *21st Century Campaign* seeks to raise over \$2.3 million for the Oceans Initiative, as part of its \$15 million Program Fund goal. In addition to safeguarding oceans, the campaign is raising funds for EDF initiatives to: rewrite environmental regulations; engage businesses in preventing pollution; protect wildlife; and help China meet energy needs without enormous environmental damage.

The \$9.5 million raised so far includes a special challenge grant from the Kresge Foundation.

**Program
Fund Goal
\$ 15
Million**



T. Charles Erickson

In New England, a measure strongly backed by EDF will rebuild depleted fish stocks and, for the first time, establish a scientifically based annual target for allowable catch.

If EDF succeeds in reaching the \$15 million Program Fund goal, Kresge will contribute \$1 million toward upgrading the computer facilities in EDF's seven offices nationwide.

For more information about donating to the Global Oceans Initiative or any program areas supported by the *21st Century Campaign*, please call or write Paula Hayes, Director of Development, in EDF's New York office (212-505-2100).

EDF Targets Hog Farm Pollution

Continued from page 1.

state's human population is about 7.2 million.) An individual farm may house 10,000 or more hogs and generate as much waste as a city of 20,000 to 50,000, because a hog produces two to five times the bodily waste of a human.

EDF biologist Dr. Douglas N. Rader, a leader of the coalition, said that the rapid growth expected in the hog industry would erase pollution reductions from other sources. "A million more hogs in the Neuse or Tar River Basins," he said, "will create about the same amount of nitrogen pollution as North Carolina is now spending millions of dollars trying to eliminate from other sources."

The coalition recommended 12 actions, including a moratorium on permits for new or expanded hog slaughtering facilities until the environmental impacts are assessed. It also recommended prohibiting unlined waste lagoons and waste disposal in wetlands, a 100-foot vegetated buffer between surface water and hog waste lagoons or spray fields, steps to minimize ammonia emissions and odor, individual non-discharge agreements for concentrated animal feed operations of more than 250 hogs, and authorization for local governments to manage hog farms in their jurisdictions. The recommendations were developed by the Neuse River Foundation, North Carolina Coastal Federation, North Carolina EDF, Pamlico-Tar River Foundation, Sierra Club, and Southern Environmental Law Center.



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