Letter VOL. XXX, NO. 4 SEPTEMBER 1999

Newly Arrived Woodpeckers Prove Value of Safe Harbor

The license plate on Dougald McCormick's truck proclaimed "I EAT Dougald RCWS". A new taste treat? Hardly. The acronym stands for red-cockaded woodpeckers-the spotted owls of the Southeast.

McCormick was concerned that the bird, declared endangered in 1970, might take up residence on his property, thereby requiring him, under the Endangered Species Act, to maintain that habitat indefinitely. So fearful are some landowners of all the regulationsand bureaucrats-that would surely follow an endangered species onto their property, they deliberately repel rare critters by plowing fields they'd rather leave fallow and felling woodlots prematurely.

But most land, particularly in the East, is



Demonstrating the value of the safe harbor proaram. red-cockaded woodpeckers are returning to their native habitat in North Carolina.

owned by private citizens. "That means if you're serious about conserving endangered species," said attorney Michael Bean, chair of EDF's wildlife program, "you have no choice but to do so on privately owned lands."

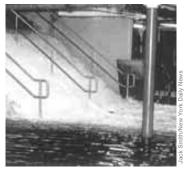
So how to remedy the disincentives the Act paradoxically creates and persuade people to manage their land to benefit endangered species? After talking to landowners, Bean and EDF economist Robert Bonnie realized that financial incentives paled beside the assurance that property owners' good stewardship wouldn't be punished with land-use restrictions.

And so the "safe harbor" concept was born. Under safe harbor agreements, Continued on page 5.

Hot Town: Global Warming and the New York City Area

Uncontrolled global warming and the resulting sea-level rise could lead to repeated flooding of New York City's roads, subways, and airports during the next century, according to a recent EDF report, Hot Nights in the City: Global Warming, Sea-Level Rise, and the New York Metropolitan Region. The report warns that the region could experience a sea-level rise of anywhere from nine inches to more than three feet by the year 2100 if steps aren't taken to reduce greenhouse gas emissions. Under the latter scenario, LaGuardia Airport and New Jersey's Meadowlands could be inundated during storm surges nearly every year. Barrierisland coastal communities, such as Jones Beach and the Hamptons, already under severe stress from beach erosion, may be forced to retreat far inland.

That forecast may sound extreme, but even under the best-case scenario, without major reductions in greenhouse gas emissions, New Yorkers have reason to sweat. The



Surging flood waters poured down a staircase at the Hoboken. New Jersev. Path train station and onto the tracks during the 1992 nor'easter.

year 1998 was the warmest on record globally, and seven of the hottest years of the century have occurred since 1990. A week after EDF issued its report, 200,000 Manhattanites lost power for nearly a day when electrical systems failed as temperatures reached 101 degrees. According to the report, carbon dioxide and other greenhouse gas emissions could push up the city's mercury five to ten degrees by the end of the next century, making New York's summer climate more like that of Miami in the best case or Houston in the worst.

The report, authored by EDF scientist Dr. Janine Bloomfield, projects a three- to six-fold increase in 90-degree days. Because of the so-called "heat island" effect, the city, with all its concrete and asphalt, already tends to be a few degrees hotter than surrounding areas. Along with higher temperatures could come higher levels of ozone pollution, endangering the health of the elderly, the young, and people with existing breathing problems. Among the other dangers: a less reliable supply of drinking water, increased frequency of both drought and heavy downpours, reduction of wetlands, and the possible Continued on page 3.



Photographers Record the "Last of the Last"

Two photographers hope to help save Hawaii's unique plants and animals, threatened from all sides.

New Power-Plant Rules Mean Cleaner Texas Air

A new law restructuring Texas's utility industry is a victory for clean air.

Global Financiers Public lenders of the G-8 nations agree to consider the environment. Keeping Our Schools

Safe and Healthy Kids should be exposed to knowledge, not chemicals.

Many Species Rebound Under Endangered Species Act

A new EDF study reveals that many endangered species in the Northeast, as well as in other areas, are rebounding, although slowly. Thanks to conservation efforts spurred by the Endangered Species Act including limiting human access to nesting beaches and controlling predators—the U.S. Atlantic Coast population of piping plovers



Piping plovers have returned to Atlantic beaches.

has nearly doubled since 1986. These diminutive shorebirds disappeared from much of their range after wild beaches gave way to development, recreation, and shore stabilization projects.

Plants are also coming back. A rare alpine wildflower called Robbins' cinquefoil has increased in its small range in New Hampshire's White Mountains. Efforts to stem the plant's decline, including re-routing hiking trails and improving transplant techniques, helped the cinquefoil more than double its population over the last 15 years. It is currently being considered for downlisting from endangered to threatened status.

Despite these gains, many species are not safe yet. "Full recoveries take time," said attorney Michael Bean, who heads EDF's wildlife program. "These species demonstrate that, with enough time and resources, full recovery is possible for many endangered species."

The EDF report, On the Road to Recovery, is available for \$4 from EDF Publications, c/o the Washington office (see address, below), or online at www.edf.org/more/10512.

Two Integrated Steel Mills in Area Rank High as Polluters

An EDF ranking of integrated iron and steel plants found that Maryland's Bethlehem Steel plant in Sparrows Point ranked among the worst in the nation for overall pollution, while West Virginia's Weirton Steel mill falls among the nation's worst third in air pollution. Integrated iron and

steel plants are larger and generally more polluting than the more common "mini mills."

The EDF rankings are based on EPA performance data, with wastes analyzed per ton of steel produced. "Both of these facilities should be of significant concern to their communities," said EDF engineer Lois Epstein. "Compared with other plants in the industry, these facilities can be doing more to streamline their processes and reduce waste."

The rankings are available online at www.edf.org/communityguides, along with descriptions of mill processes and strategies for preventing pollution.

"With just a few mouse-clicks on EDF's Iron and Steel Community Guide, neighbors can learn how these plants are doing in their efforts to prevent pollution," said Epstein. "The web site can help the public work with these facilities to reduce pollution."



A new study of pollution from steel mills shows significant room for improvement.

Town is Composting Commercial Food Waste on Long Island

The small village of Bellport on Long Island has begun collecting and composting food waste from all 13 restaurants, supermarkets, and deli's in town, thanks to efforts by Mayor Frank Trotta and the Board and Compost Committee of Bellport. The food waste is put in special containers and picked up with other trash. It is then delivered to four recently purchased small-scale commercial composters called Earth Tubs, which together can handle 600 pounds of waste per day.

"This represents the first time that a municipality in the State of New York has embarked on a systematic program to compost food waste from all of its commercial enterprises that generate such waste," said EDF General Counsel James T. B. Tripp. Tripp, founding EDF trustee Art Cooley, and three EDF members make up Bellport's Compost Committee.

The Village invested in the Earth Tubs

using money that would otherwise go to pay the tipping fees at an incinerator. A rough estimate suggests that the project will pay for itself in five years, if not sooner.

"Beyond that, there's profit to be made," said Cooley. The New York Department of Environmental Conservation provided the Village with a partial grant in support of the innovative initiative.

Cooley and Tripp hope the pilot program will inspire other communities and businesses to compost food waste instead of incurring the economic and environmental costs of incinerating or landfilling it. Prior to this latest venture, the Board and Compost Committee started a successful residential food-waste composting program, in which nearly half the village's households now participate, using backyard composters.

Information about home composting is available at www.edf.org/more/10515.

ESF Letter

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National Headquarters 257 Park Avenue South New York, NY 10010 212-505-2100

Capital Office 1875 Connecticut Ave., NW Washington, DC 20009 202-387-3500 California Office 5655 College Avenue Oakland, CA 94618 510-658-8008

Rocky Mountain Office 1405 Arapahoe Avenue Boulder, CO 80302 303-440-4901 North Carolina EDF 2500 Blue Ridge Road Raleigh, NC 27607 919-881-2601

Texas Office 44 East Avenue Austin, TX 78701 512-478-5161 Project Offices

6 Faneuil Hall Marketplace Boston, MA 02109 617-723-2996

10951 West Pico Boulevard Los Angeles, CA 90064 310-441-5604

Director's Message

Groups Work Together To Save the Everglades

People often ask if environmental groups work together. Recently I returned from a three-day meeting with the heads of more than 20 national environmental organiza-



tions, who get together several times a year to address critical environmental threats. We are working together on many issues, such as efforts to reduce greenhouse gas emissions to curb global warming. Several groups were active in founding the

Fred Krupp

Coalition to End Childhood Lead Poisoning.

At our latest meeting, we mobilized to help save the Florida Everglades. Once a fourmillion-acre wetland wilderness and habitat for some 1,500 species of animals and plants, the Everglades is now in danger of collapse, with many of its species on the verge of extinction. Dikes, drainage canals, and other waterworks built in the last 50 years to open up land for vast sugarcane fields and urban sprawl have reduced this magnificent "river of grass" to half its original size.

New Hope for the Everglades

We met on the eve of a historic opportunity to save the Everglades, as Congress was taking up a new proposal by the Army Corps of Engineers to restore the area. The multi-billion dollar plan would fix the mistakes that have been made in manipulating the Everglades' natural flow of water and would begin to restore this delicate ecosystem. EDF has joined Defenders of Wildlife, the Everglades Coalition, National Audubon Society, National Parks and Conservation Association, National Wildlife Federation, Natural Resources Defense Council, Sierra Club, and World Wildlife Fund, in an Everglades working group that seeks both to strengthen the Corps of Engineers' plan and to rally the country behind it.

Although the cost of restoration is high and the plan still needs some improvement, the cost of doing nothing is greater. The Everglades continue to die bit by bit with each passing day. We must make the commitment now to halt this piecemeal destruction of an irreplaceable American treasure.

Faid Thurs

New York Could Face Hotter Days, Rising Seas

Continued from page 1.

reintroduction of mosquito-borne infectious diseases.

Warming and Other Coastal Cities

These consequences are not limited to New York. Other low-lying port cities, including New Orleans and Miami, may be even more at risk. Experts say that, nationwide, a one-foot or greater rise in sea level could eliminate 20% to 40% of U.S. wetlands, causing severe damage to vital fisheries and wildlife habitat. Lethal heat waves, such as the one in 1995 that killed more than 500 people in Chicago,



At a press conference, EDF scientist Michael Oppenheimer explained how uncontrolled global warming could affect the New York metropolitan area.

could become more common, although adaptive measures, such as increased use of air conditioning and public awareness of the dangers of the heat could lessen the number of fatalities. Drought conditions, like those that threatened agriculture and caused massive wildfires in Florida and California in 1998, could also become more frequent.

"The New York region of the future could face serious disruption if the U.S. doesn't take action to cut greenhouse gas emissions now," said Dr. Michael Oppenheimer, EDF chief scientist. Equipped with more precise computer



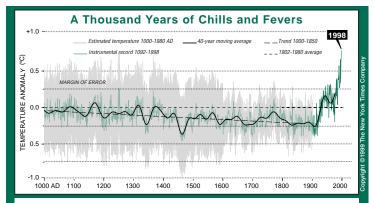
Janine Bloomfield

models for calculating climate change at the regional level, scientists are making the case for immediate action.

Bloomfield said that, in addition to adaptive measures, individuals and cities should start by reducing their use of fossil fuels to lessen the extent of any warming, taking steps that will also reduce pollution now and improve air and water quality in the region. Among these steps are improving energy efficiency, expanding mass transit, increasing use of alternative energy, planting trees, and encouraging building owners to replace black rooftops with light reflective materials and solar panels. "We have a window of opportunity to prevent the worst scenarios from coming true," Bloomfield said.

"The longer we wait, the more drastic and costly—the response will have to be."

Hot Nights in the City is available for \$10 from EDF Publications, c/o the Washington office. The full report is also available online at www.edf.org/hotny.



The Northern Hemisphere has been warmer in the 20th century than at any time in the past millennium, and the 1990's was the warmest decade ever, as this reconstruction of hemispheric temperatures suggests. The study, by Dr. Michael E. Mann and Dr. Raymond S. Bradley of the University of Massachusetts and Dr. Malcom K. Hughes of the University of Arizona, appeared in Geophysical Research Letters.

Striving to Preserve Native Wildlife in an Exotic Land *Photographers Document Dozens of Critically Endangered Hawaiian Species*

Over the last 18 months, photographers David Liittschwager and Susan Middleton have scaled sharp lava peaks and trudged through some of the world's wettest rainforests to record the last of the last—surviving individual specimens of Hawaii's endangered native wildlife. Their compelling images are part of an Environmental Defense Fund effort to protect what's been called "one of the rarest and most improbable living assemblages on the earth" as well as "the endangered species capital of the world."

Although Hawaii has only 0.2% of U.S. land area, more than 30% of the species on the U.S. Endangered Species List make their homes in the state. Of Hawaiis 1200 known plant species, one-quarter are threatened with extinction and half are in decline. The islands' only native mammals—the monk seal and the hoary bat—are both in serious danger. They

"Every scientist we've worked with in Hawaii bas witnessed at least one species go extinct in their lifetime."

are, in the words of EDF ecologist Dr. David Wilcove, "too gentle for this world."

Liittschwager and Middleton are no strangers to imperiled wildlife. For *Witness* (Chronicle Books, 1994) and *Here Today* (Chronicle Books, 1991), they photographed portraits of hundreds of endangered species throughout the continental United States. "But Hawaii," said Middleton, "is just so much more extreme. Every scientist we've worked with there has witnessed at least one species—a plant or animal they've studiedgo extinct in their lifetime. So there's a sense of urgency and a need for immediate research and conservation."

Representing the ecological mosaic of the planet's most isolated island group has been no easy task. Liittschwager and Middleton traverse the deep-sea channels separating the major islands—Kauai, Oahu, Molokai, Maui, and Hawaii. Often accompanied by field biologists, they have covered coastal, lowland, and mountainous terrains, leaving few environments unexplored. One notable exception, said Liittschwager, is the vast undersea world of marine species, which the photographers hope to document in future projects.

The Last of the Last

"Many species here are completely dependent on their immediate microenvironments, which are more threatened than at any time in history," Littschwager noted. He pointed to an image of the crested honeycreeper, a songbird that is the world's only surviving species in the palmeria genus. Native to Maui and adapted only to certain native plants, the crested honeycreeper will most certainly go extinct in the wild if its limited, fragile habitat is destroyed. "Even the happyface spider (*see page 8)*, which is not that rare yet, could disappear if its small community of native host plants vanishes."

"And the plants," he emphasized, "are indeed vanishing, mostly due to invasive exotic species and habitat degradation." He pulled out a spreadsheet of the so-called "less-than-twenty club," which lists 190 species and nearly 700 populations for which less than twenty individuals remain in the wild.

"That spreadsheet really won't inspire



Crested Honeycreeper

most people, though," Middleton interrupted. "We're hoping that photos like these will." Pointing to the image of a graceful



David Liittschwager and Susan Middleton at the site of Lehua makanoe.

hibiscus clayi, she added, "There are only three known remaining."

"Without EDF," she said, "we wouldn't be able to send this message to the world. These are the last of the last. The scientists we've worked with know solutions that could save this habitat, remove invasive species, and reintroduce these fragile populations where necessary. What's lacking is immediate and sufficient support to do so. We hope this project inspires people and governments to save these irreplaceable species while we still can."

By Kurt Hupé

Hardcover copies of Liittschwager and Middleton's book *Witness* are available for \$50 postpaid from EDF Publications, c/o the Washington office (see address, p. 2).



Hibiscus clavi



Lehua makanoe

Texas Utility Restructuring Act is Victory for Environment

A new law restructuring Texas's electric Autility industry contains key EDFbacked provisions for cleaning up the air to benefit all Texans. The legislation, signed into law by Governor George W. Bush in June, could serve as a model for other states and for Congress to address air pollution through electric utility restructuring.

"If the 'oil and gas state' can support renewable energy, so can the rest of the country," said Mark MacLeod, director of the state energy program for EDF's Texas office. MacLeod led EDF's long efforts with state legislators to craft a bill that will introduce competition to the electric industry while securing measures to clean up Texas air. "The environmental aspects of this bill surpassed all our expectations."

With support from Public Citizen and Sustainable Energy and Economic Development, a Texas grassroots group, EDF designed a three-year strategy to reduce emissions from "grandfathered" power plants-plants that have been exempted from state emissions limits since 1971-and to promote solutions to global warming. The success in obtaining pollution reductions from grandfathered plants is especially noteworthy, because competing legislative proposals to cut emissions from these facilities would have relied on an unenforceable, voluntary approach.

The new law will reduce emissions from more than 130 grandfathered Texas power plants by over 110,000 tons annually. Most important, emissions from these plants will be permanently capped, even if their electricity production increases. Within four years, the bill requires a 50% reduction in nitrogen oxides and a 25% reduction in sulfur oxides, emissions that cause both human health problems and acid rain.

Wind Power To Increase 10-Fold

The new law also requires consistent development of renewable energy sources in Texas. It sets a mandato-

ry schedule requiring 2000 megawatts of new renewable capacity to be phased in within 10 years. This will increase the amount of wind energy available in Texas to 10 times its current level, the largest renewable energy growth mandated in any state to date.

The law also ensures that energy efficiency programs will be available to all Texans. Each electric company must offer incentives designed to reduce annual growth in electricity demand by at least 10%. The law also requires the Public Utility Commission to establish rules to dis-



Mark MacLeod (left) and Texas state representative Steve Wolens worked to reduce emissions from "grandfathered" power plants such as this one near downtown Austin.

close the environmental impacts of utility deregulation.

"The law that the governor signed is far better than the two bills introduced in the House and Senate in January," MacLeod said. "This is mainly due to Representative Steve Wolens, the House sponsor of the bill, who spent hours with EDF staff discussing the environmental complexities of deregulation. This result shows that, with the cooperation of a committed legislator and his staff, grassroots pressure, and environmental expertise, the political system can and does work to protect the environment."

Safe Harbor is Helping Landowners Help Endangered Species

Continued from page 1.

landowners pledge to manage their property to benefit endangered wildlife for a predetermined length of time. Depending on the ecosystem, this could mean anything from creating a wetland to conducting prescribed burns. If an endangered species appears after the habitat has been improved, the property owner is exempt from the Act's rigid prohibitions.

When the agreement ends, the landowner can renew it or develop the property. Although this means the habitat could ultimately be lost, safe harbor agreements still have real value. "At the very least, they buy time, and for many endangered species, time is what's in shortest supply," Bean pointed out. "For as long as the agreement remains in effect, safe harbor yields a net increase in the species' habitat."

In June, the U.S. Fish and Wildlife Ser-



Three architects of safe harbor: David Wilcove, Michael Bean. and Robert Bonnie of EDF's wildlife staff.

vice officially announced its policy on safe harbor agreements, which already protect more than a million acres nationwide. At the same time, EDF ecologist Dr. David Wilcove prepared a comprehensive handbook on safe harbor, published in partnership with the National Cattlemen's Beef Association-a fact that should give the document greater credibility with agricultural landowners.

Even more exciting: This spring, two new breeding pairs of red-cockaded woodpeckers took up residence on the grounds of North Carolina's Pinehurst Resort and Country Club, site of this year's U.S. Open and of the nation's first safe harbor agreement. Having helped craft that agreement in 1995, Bean and Bonnie are justifiably proud. "It's like the movie Field of Dreams," said Bean. "If you build it, they will come."

The Safe Harbor handbook, Helping Landowners Help Endangered Species, is available free from EDF Publications, c/o the Washington office (see address, p. 2), or online at www.edf.org/safeharbor. The online site also contains a comprehensive collection of safe harbor agreements and other useful information.

Progress on Common Global Environmental Guidelines

DF and other groups achieved a major breakthrough in June, when leaders of the major industrialized nations of the Group of Eight (G-8) agreed at their annual summit to work toward common environmental guidelines for government-funded Export Credit Agencies and to finish by their Summit in 2001. The G-8 members are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States, plus Russia, which recently joined and does not participate in the financial discussions.

Export Credit Agencies of the major industrial countries provide over \$100 billion annually in loans, guarantees, and insurance to support overseas private sector projects and stimulate trade. Together, they are the most important public global financial institutions, supporting more than 10% of world trade.

Almost all of these agencies, however, lack adequate environmental standards. As a result, their investments in large power plants, dams, forestry development, mining, and big infrastructure projects can have huge destructive impacts. Roads and pipelines are built through pristine rain-



Funders without adequate environmental standards are helping China dam the scenic Three Gorges of the Yangtze River.

forests, large dams block rivers and inundate canyons, and gold mines discharge toxic waste in indigenous people's territory.

EDF and other groups have helped improve environmental guidelines for the U.S. Export-Import Bank. But without common standards, the export finance

Celebrate America Recycles Day on Nov. 15!

Sunday, November 15 is the third annual America Recycles Day, when communities across the country will celebrate the environmental benefits of recycling and buying prod-



ucts made from recycled materials. To draw attention to the increasing practicality of using recycled materials, an entire house primarily from such materials will be given

away in a drawing that day. The "American Green Dream House," valued at \$200,000, will be built for the winner, with up to \$35,000 allotted for the purchase of land.

To enter the American Green Dream House contest, print your pledge to recycle and buy recycled along with your complete name and address on a 3" x 5" piece of scrap paper and mail it before November 15 to America Recycles Day Contest, c/o Remanufacturing Industries Council International, P.O. Box 10807, Chantilly, VA 20153-0807.

For more information or to help with America Recycles Day events in your state, call your state coordinator. Coordinators' phone numbers are available from EDF member services at 1-800-684-3322 or go to www.edf.org/more/10502.

Please send us your e-mail address!

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It's confidential, it takes just a moment, and it will help EDF reduce waste and save money. Please do it today!

agencies of other countries are supporting projects—such as the Three Gorges dam in China—that the U.S. has rejected as environmentally unsound. This puts U.S. business at a disadvantage and risks a "race to the bottom" where agencies compete to fund projects with lower and lower environmental and social standards.

For more than two years, EDF and some 140 non-governmental organizations (NGO's) around the world have been working to promote an agreement on common environmental standards for these agencies. In June, over French obstructionism and with the support of the new German government, the NGO's won from the G-8 leaders a commitment to work within the Organization of Economic Cooperation and Development (OECD) toward common environmental guidelines for export finance agencies and to complete this work by the 2001 G-8 Summit. More than a thousand messages to the President of France and the Japanese Prime Minister, prompted by an EDF Action Alert sent out just as the summit was starting, helped influence the successful outcome.

"We now have a high-level commitment we can hold them to," said EDF International attorney Bruce Rich. "We achieved this through a lot of behind-the-scenes lobbying with German, British, Japanese, and Italian NGO's and the over one thousand activists' messages sent to the President of France and the Japanese Prime Minister."

For more information on Export Finance Agencies and the environment, including several EDF International Program reports, see www.edf.org/more/10516.

Can You Give at the Office?

If you work for the Federal government, you can donate to EDF through your paycheck as part of the Combined Federal Campaign. Environmental Defense Fund is listed under "Earth Share;" EDF's code number is 0906.

If your workplace has a payroll deduction campaign that doesn't yet include environmental groups, you may still have the option of earmarking your donation to EDF. Just write in "EDF, 257 Park Avenue South, New York, NY 10010." Please ask to have your gift acknowledged so EDF can credit your account. If you'd like to help EDF gain access to the payroll deduction campaign at your workplace, please call Laura Gassler at 1-800-684-3322.

Making Our Children's Schools Safer and Healthier

September is back-to-school month for most of our nation's children, an appropriate time to think about how parents, teachers, and school boards can make schools safer and healthier. Between the ages of 5 and 18, a youngster may spend 14,000 hours inside school buildings. All too often, research has shown, kids (and the adults who teach them) can be exposed to more



Pollution affects children more than most adults, so it is particularly serious in schools.

than knowledge during the school day.

Products such as synthetic building materials, carpets, pesticides, and cleaning solutions can expose children to chemicals that are known to be toxic or don't have adequate health assessments to ensure children's safety. Many schools have sought to seal up to save energy, especially following the energy shortages and soaring fossil-fuel prices of the 1970's. That very effort has often worked to reduce ventilation and to seal in air pollutants. According to the American Academy of Pediatrics, "Air pollution affects children more than adults because of their narrow airways, more rapid rate of respiration, and the fact that they inhale more pollutants per pound of body weight."

Fortunately, schools can take actions to reduce or eliminate problems—often, although not always, at little or no cost. Environment & Human Health, Inc., a non-profit organization of doctors, public health professionals, and policy experts, has suggested several steps to healthier schools, such as:

Minimize exposure to toxic pesticides.

In a recent Connecticut survey, most responding school districts reported spraying pesticides inside school buildings, generally without the prior knowledge or consent of parents, students, or teachers. But some school systems effectively control pests without use of pesticides or have adopted "integrated pest management," a combination of approaches in which synthetic pesticides are considered a last resort.

Ensure proper ventilation of schools.

A 1995 General Accounting Office study showed more than half the nation's schools had experienced indoor air quality problems. Ventilating systems should provide at least 15 cubic feet of fresh outdoor air per minute per occupant, and it is important to ensure that ventilation systems filter out pollens (which can trigger allergy and asthmatic reactions) and other pollutants that can be brought in with fresh outdoor air. Air intakes should not be near outdoor smoking areas, standing water (a possible source of pathogens), exhaust fans from labs or furnaces, idling vehicles, or other sources of pollutants.

Ensure separate ventilation of art rooms and chemistry labs. Exhaust from art rooms, photo darkrooms, and chemistry labs should not enter other areas of the school building.

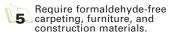
Photocopy machines, often located in confined areas, need adequate ventilation to prevent buildup of ozone and other pollutants.

Eliminate wet areas and damp carpeting.

Molds and fungi can cause health problems. Keep drapes, carpets, and ventilation systems clean to reduce levels of molds and dust, which can cause allergic or asthmatic reactions in some children and adults. Prevent water leaks and floods, and if they occur, quickly clean and dry the damp building materials to prevent the growth of molds.

Specify non-toxic, low-odor paints, markers, and other school supplies.

Paints, dyes, and glues from art classes and solvents from permanent markers are common sources of air pollution. Purchase non-toxic, low-odor alternative products instead. (Low-odor products are sometimes labeled low-VOC or low in volatile organic compounds.) Also, use the least-toxic janitorial cleaning products available.



Formaldehyde, a suspected carcinogen also linked to respiratory problems, is

released from many carpets, carpet backings, and the adhesives used to apply them. Formaldehyde is also released from some furniture and construction materials such as particleboard.

6 Seal treated wood often used for playground equipment.

Treated or processed wood is impregnated with copper and arsenic to deter pest infestation. Playground equipment or picnic tables made from such wood should be painted to seal it and prevent the arsenic from leaching.

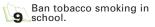
Avoid exposure to exhaust from idling vehicles.

Buses and other vehicles should not idle their engines for long periods of time near the air intake of school ventilating systems. See that children do not wait at bus stops where vehicles idle excessively.

Test schools for radon and lead.

Radon is an odorless radioactive gas that emanates from underground sources in some areas. Although hazardous, it can easily be tested for and remedied. Drinking water should be tested for lead that can come from pipes with lead solder.

Schools built before 1978—and especially before 1950—should test to find out if they have lead-based paint. If so, the paint should be meticulously maintained and special techniques used on any repairs of lead-painted surfaces. Keep careful records of the location of any lead paint, so that future remodeling and repair projects can be conducted safely. (Similar precautions should be used for asbestos.)



Schools must not allow smoking anywhere in the school. Outdoor smoking areas should be away from foot traffic and from air intakes for the school or other buildings.

- by Jon Luoma

For More Information

Go online to www.edf.org/more/10514 for "Twelve Steps to Healthier Schools" and details on EPA's Indoor Air Quality Tools for Schools Action Kit. The entire Action Kit is available for \$22.00 (GPO Document Ordering Number 055-000-00503-6) from the U.S. Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250 or by calling 202-512-1800.

Federal Court Casts Cloud Over Major Clean Air Program

n a serious setback to the environment, a Federal appeals court has cast a cloud over a major clean air program aimed at curbing smog and sooty fine particles across the United States. At issue are the Environmental Protection Agency's 1997 public health guidelines established under the Clean Air Act, which tightened emissions standards for ground-level ozone and soot.

À three-judge panel of the U.S. Court of Appeals for the DC Circuit held, by a 2-1 margin, that EPA failed to establish clear criteria for determining the level of health protection provided by its standards, and thus assumed "an unconstitutional delegation of legislative power." The court's action was a victory for a broad range of industry groups, from trucking companies to electric utilities, which had fought the tougher airquality rules.

"This ruling is stunning," said EDF attorney Vickie Patton. "The court based its decision on a dormant legal doctrine that the Supreme Court has rejected in more than 30 cases over the past 60 years." According to a recent national survey conducted for the American Lung Association, 86% of voters favor stricter clean air legislation, and 77% trust EPA to set the standards.

"The judges' opinion begs a fundamental question about who should make these important decisions," added EDF attorney Joe Goffman. "The vast majority of the American public—echoing the U.S. Congress, which has twice reauthorized the Clean Air Act since 1970—believes EPA should be entrusted with such decisions about public health and the environment, especially where complex technical issues are involved." Contrary to some press reports, the more stringent smog and soot standards will remain on the books pending EPA's reevaluation of its standards in light of the judicial decision.

Although the judges unanimously found that EPA had ample scientific basis for its

action, two of the judges objected to EPA's interpretation of its legal authority. In other words, the court affirmed the technical basis for the standards but disagreed with the legal rationale. This Federal appeals court has reviewed previous national air-quality standards on several occasions since 1970, and never before has it decided that EPA's action was unconstitutional.

The Justice Depart-

ment has asked the full circuit court to hear the case, and EPA has vowed to take the case to the U.S. Supreme Court, if necessary. "EDF will vigorously support EPA's appeal," said Patton. "We believe EPA needs to make further progress toward cleaner, more healthful air. And most of the American public shares that view." In the interim, EDF will press for action on other clean air initiatives, such as new tailpipe emissions standards for cars and trucks and cleaner gasoline, and will continue to push for strong implementation of existing clean air standards.

While supporting EPA's clean air standards, Environmental Defense Fund

You'll Have a "Happy Face," too ...

will also push for new rules on truck emissions.



Happyface Spider photographed in Hawaii by David Liittschwager and Susan Middleton.

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EDF Office Addresses on page 2.

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Endangered Species Rebounding in Gulf of Mexico, Northern Rockies, and Texas

A new EDF study finds that many endan-gered species throughout

An EDF ranking of integrated iron

and steel plants found that the Geneva

Steel mill in Vineyard, UT, ranks among

the worst third of mills in the nation for

releases of toxic chemicals. The mill, near

Provo, released more than 1.9 million

pounds of toxic chemicals in 1996-or

about one pound for each ton of steel

produced-nearly four times the rate of

toxic chemicals released by

the country's best-performing

integrated plants. Integrated

iron and steel plants are larg-

er and generally more pollut-

ing than the more common

using EPA measures of indus-

try performance. Although the

Geneva Steel mill was among

the highest for releases of toxic

chemicals, it ranked in the

middle-of-the-road for overall

performance. EDF's Iron and

Steel Community Guide web

site can help the public work

with Geneva Steel and other

mills to reduce the pollution

EDF prepared the rankings,

"mini mills."

the country are slowly rebounding, thanks to protective measures taken under the Endangered Species Act.

Among the most celebrated rebounds in the Gulf Coast area has been the rising number of Kemp's ridley sea turtles nesting in Mexico following their near-extinction in the 1970's. The Endangered Species Act has greatly reduced accidental drownings of Kemp's ridley and other endangered sea turtles by requiring shrimp boats to



Reintroduced in the Northern Rockies, grav wolves are doing well,

equip their nets with turtle excluder devices,

or TED's. Protection of turtle nesting beaches has also contributed to increased numbers.

In the Northern Rocky Mountains, two "experimental populations" of gray wolves have fared extremely well since reintroduction to Yellowstone and central Idaho began in 1995, although the continued well-being of these populations depends on the appeal of a court decision

ordering their removal. By fall of 1998, well over 100 wolves in each of these locations were reshaping ecosystems in historic habitats from which they had been eliminated more than half a century ago.

Texas's two populations of blackcapped vireos have increased dramatically as a result of habitat management measures. If similar efforts are carried out throughout this songbird's range, its recovery is clearly attainable. These species demonstrate that, with sufficient time and resources, full recovery is possible for many endangered species.

The EDF report, On the Road to Recovery, is available for \$4 from EDF Publications. c/o the Washington office (see address below), or online at www.edf.org/more/10512.

Clean Air Victory in Colorado Utah Steel Mill Ranks High in Toxic Releases, Average Overall

EDF's Rocky Mountain office has landed an air-quality victory that could reduce the "brown cloud" along Colorado's Front Range by 10% to 20%. In 1997, Public Service Company (PSCo), the primary utility servicing the Front Range, agreed with EDF to voluntarily reduce sulfur dioxide emissions by 70% and nitrogen oxide emissions by 40%, if they could recover their costs.

Legislation approving the plan passed the Colorado Air Quality Control Commission in 1998, but a number of business interests sued to oppose the decision, and the case went to trial before the Public Utility Commission this past spring. EDF and the Land and Water Fund of the Rockies intervened on behalf of PSCo. A settlement was reached in May, granting PSCo recovery of its pollution control costs.

Denver is the only city in the West with coal-fired plants located directly in the metropolitan region. Reducing their emissions will be a significant help in eliminating the region's infamous brown cloud.

"This is the single most effective measure we can take at the local level to improve air quality," said attorney Jim Martin of EDF's Rocky Mountain office.

EOF Letter

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created for each ton of steel produced.

EDF praised Geneva Steel for the planned upgrade of its coke-making operations, which should significantly reduce emissions from that process.

The rankings are available online at www.edf.org/communityguides, along with descriptions of mill processes and strategies for preventing pollution.



A new study of pollution from steel mills shows significant room for improvement.

National Headquarters California Office 257 Park Avenue South New York, NY 10010

Capital Office 1875 Connecticut Ave., NW Washington, DC 20009 202-387-3500

212-505-2100

5655 College Avenue Oakland, CA 94618 510-658-8008

Rocky Mountain Office 1405 Arapahoe Avenue Boulder, CO 80302 303-440-4901

North Carolina EDF 2500 Blue Bidge Boad Raleigh, NC 27607 919-881-2601

Texas Office 44 Fast Avenue Austin, TX 78701 512-478-5161

Project Offices

6 Faneuil Hall Marketplace Boston, MA 02109 617-723-2996

10951 West Pico Boulevard Los Angeles, CA 90064 310-441-5604

Midwest Steel Mills Among the Worst—and Best—on Pollution

An EDF ranking of integrated iron and steel plants found that Midwestern steel mills rank among the nation's worst—and best—in pollution prevention, and that

some mills submitted such flawed data to EPA that they could not be ranked. The EDF rankings are based on EPA data from March 1999.

The rankings list the following mills as among the worst third in the nation in pollution prevention: AK Steel in Middletown, OH; Ispat Inland Steel in East Chicago, IN; LTV Steel in Cleveland, OH; National Steel in Granite City, IL; and USX-US Steel in Gary, IN.

Ranking among the best third in pollution prevention were Warren, Ohio's, WCI Steel and southeast Chicago's Acme Steel. The

mills which submitted flawed data and could not be ranked were East Chicago's LTV Steel, Lorain, Ohio's USS/Kobe Steel, and Steubenville, Ohio's Wheeling-Pittsburgh Steel.

The rankings are available online at

www.edf.org/communityguides, along with descriptions of mill processes and strategies for preventing pollution. "With just a few mouse-clicks on EDF's Iron and Steel Com-



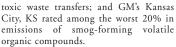
A new study of pollution from steel mills shows significant room for improvement.

munity Guide, neighbors can learn how these plants are doing in their efforts to prevent pollution," said Lois Epstein, EDF engineer. "The website can help the public work with these facilities to reduce pollution for each ton of steel produced."

Good, Bad, and Ugly: EDF Ranks Midwest Region's Auto Plants

The region's auto plants are a mixed bag in terms of pollution prevention, according to a ranking released by EDF in May. Among the worst overall performers are General Motors' Pontiac, MI; Fort Wayne, IN; and Wentzville, MO facilities; Ford's Hazelwood, MO, plant and Honda's Maryville, OH plant.

Poor performance was recorded for individual pollution prevention categories as well. The Normal, IL Diamond-Star plant (now owned and operated by Mitzubishi) ranked among the worst 20% of U.S. auto plants in toxic waste generation; GM's Janesville, WI facility ranked among the worst 25% in off-site



Chrysler (now Daimler-Chrysler) had three of the nine best plants. All plants, however, showed room for improvement.

"None of the region's auto assembly facilities have adopted all the cleanest practices and technologies available," said Kevin Mills, director of EDF's Pollution Prevention Alliance. "All of them could be doing more to prevent pollution, even the best performers."

EDF's ranking report is available online at www.edf.org/more/10513.

Species Rebound Under Endangered Species Act

A new EDF study reveals that many endangered species living in the Midwest (as well as other areas) are rebounding, although slowly. The gray wolf is among the most celebrated recovering species. Since the Endangered Species Act was signed into law in 1973, gray wolf populations in Minnesota, Michigan, and Wisconsin have increased dramatically.

In addition, the Kirtland's warbler, a migratory songbird that nests almost entirely in young jack pine stands in Michigan, has increased, thanks to active management of its unique habitat and a program to control cowbirds, common birds that lay their eggs in warbler nests, to the detriment of the warbler's young.

The wolf, warbler and many other species are not safe yet, however. Full recoveries take time, said attorney Michael Bean, who heads EDF's wildlife program. "Unfortunately, much of this progress is overlooked by those who want to judge the Act



Gray wolf populations in the northern Midwest have increased dramatically in recent years.

only by the number of species that have fully recovered. These species demonstrate that, with enough time and resources, full recovery is possible for many speicies."

The EDF report, *On the Road to Recovery*, is available for \$4 from EDF Publications, c/o the Washington office (see address below) or at www.edf.org/more/10512.

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National Headquarters 257 Park Avenue South New York, NY 10010 212-505-2100

Capital Office 1875 Connecticut Ave., NW Washington, DC 20009 202-387-3500

California Office 5655 College Avenue Oakland, CA 94618 510-658-8008

Rocky Mountain Office 1405 Arapahoe Avenue Boulder, C0 80302 303-440-4901 North Carolina EDF 2500 Blue Ridge Road Raleigh, NC 27607 919-881-2601

Texas Office 44 East Avenue Austin, TX 78701 512-478-5161 Project Offices

6 Faneuil Hall Marketplace Boston, MA 02109 617-723-2996

10951 West Pico Boulevard Los Angeles, CA 90064 310-441-5604

Doug Rader: Captivated by Nature, He Works to Defend It

An EDF marine ecologist since 1988, Dr. Douglas N. Rader works to protect and restore habitats and marine ecosystems and fisheries along the Eastern Seaboard. During



his early years at EDF, his analysis of forested wetlands fueled EDF's lawsuit against timber producer Weyerhaueser to prevent the conversion of wetlands to tree plantations. The suit led not only

Doug Rader

to a new national policy restricting the location of pine plantations in wetlands, but to a cooperative EDF effort with Weyerhaueser to protect the East Dismal Swamp. He also helped set up a model North Carolina program to control excess nutrients flowing from cities and farms into the Tar-Pamlico River Basin.

Rader was recently appointed to the South Atlantic Fisheries Management Council's Marine Reserves Advisory Panel. The panel, he says, "has great potential to use the power of 'parks of the sea' to help restore healthy fish populations and protect our most valuable marine habitats.

Rader's commitment to the environment grew out of a deep love for wild things. As a boy, he camped in the Southeast with his family, collecting "anything from the outdoors-seeds, rocks, minerals, snakes in pillow cases " At the University of North Carolina (UNC), Rader majored in biology, studying insect-eating plants. He received his Masters in zoology at the University of Washington, working on intertidal ecology, and his Ph.D. from UNC with a dissertation on salt marsh ecology. Habitat destruction of sites he studied in college and explored as a child inspired Rader to head for a conservationoriented career.

Endangered Species are Rebounding In and Around Florida

A new EDF study, On the Road to Recovery, reveals that endangered species living around Florida (as well as in other areas) are rebounding, although slowly. Among the most celebrated rebounds in the Gulf Coast area is the rising number of Kemp's ridley sea turtles nesting in Mexico following their near-extinction in the 1970's. The Endangered Species Act has greatly reduced accidental drownings of Kemp's ridley and other endangered sea turtles by requiring shrimp boats to equip their nets with turtle excluder devices, or TEDs. Protection of turtle nesting beaches has also contributed to increased numbers.

Meanwhile, the stately white whooping crane has returned to Florida, thanks to the experimental establishment of a new, nonmigratory flock in the state. For decades, wild whooping cranes nested only in Canada's Wood Buffalo National Park and winged their way south to winter at Texas's Aransas National Wildlife Refuge. The addition of the Florida flock puts the total wild whooping crane population at over 250 birds—likely more than any time this century. "Despite these gains, the Kemp's ridley and whooping crane are not yet safe," said attorney Michael Bean, who heads



Whooping cranes are thriving in Florida.

EDF's wildlife program. "Full recoveries take time. Their progress demonstrates, however, that with sufficient time and resources, full recovery is possible for many endangered species."

The EDF report is available for \$4 from EDF Publications, c/o the Washington office (see address below) or at www.edf.org/more/10512.

Hog Waste Lagoons Still Plague North Carolina's Coasts

EDF and four other environmental groups are calling on the North Carolina legislature to adopt strict regulations on hog farming in the state. An EDF study released in June concluded that North Carolina's more than 3,800 open-pit hog waste lagoons threaten the state's economy, public health, and environment.

EDF's recommendations include extending a moratorium on new hog factories until a firm plan is set; adopting permanent performance standards for all hogfarm facilities; cleaning up abandoned lagoons within two years; and consistently requiring hog farms to comply with environmental laws.

All told, some 19 million tons of hog waste are treated in a primitive system of lagoons and spray fields that leach waste into drinking water supplies, pollute air and streams, and threaten other natural resources. These include 550 abandoned lagoons that contain sludge laden with high levels of nutrients and heavy metals.

"Atmospheric pollution and runoff resulting from hog operations in eastern North Carolina have substantially increased nitrogen pollution in the Albemarle and Pamlico sounds, which are saturated with more nitrogen than they can handle," said EDF scientist Dr. Joseph Rudek. "These waters are considered among the nation's premier fishing grounds and an essential draw for North Carolina's \$2 billion coastal tourism industry."

Tour a factory farm online, and hear what its neighbors are saying, at the special EDF Hog Watch web site, www.hogwatch.org.



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Capital Office 1875 Connecticut Ave., NW Washington, DC 20009 202-387-3500 California Office 5655 College Avenue Oakland, CA 94618 510-658-8008

Rocky Mountain Office 1405 Arapahoe Avenue Boulder, CO 80302 303-440-4901 North Carolina EDF 2500 Blue Ridge Road Raleigh, NC 27607 919-881-2601

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West Coast Species Rebound Under Endangered Species Act

A new EDF study. On the Road to Recovery, finds that many endangered species along the Pacific Coast are rebounding, although slowly. Protective measures spurred by the Endangered Species Act have helped bring the Aleutian Canada goose, the California (or southern) sea otter, and the Lange's metalmark butterfly, found only in California, back from the brink of extinction.

State and Federal officials worked with sportsmen to ban shooting of Aleutian Canada geese along the Pacific Coast. This action and the elimination of arctic foxes from the Aleutian Islands (where they were introduced in the 1830's) have led to a significant increase in the birds' numbers.

The California sea otter was once thought extinct, a victim of the fur trade, but discovery of a colony of surviving otters gave this animal a second chance. Despite significant, unexplained declines since 1995, otter numbers in spring 1998 were still 57% higher than in 1982. If the recent declines continue, however, the apparent progress of the past two decades could be erased. The cautionary



California Sea Otter

lesson here is that it is necessary to remain vigilant, even after a species has apparently made good progress toward recovery.

The EDF report is available for \$4 from EDF Publications, c/o the Washington office (below) or online at www.edf.org/more/10512.

EDF Plan Would Ease Congestion on Bay Area's Busiest Road

This machine is shifting a moveable

lane barrier to add an extra lane in the

conaested direction.

EDF has proposed a plan for reduced congestion, faster commutes, and improved mass transit on the I-680 Sunol Grade, the

Bay Area's most congested which corridor. links expanding suburbs with the Silicon Valley job center. The plan calls for flexible lanes, Express Lanes, and increased Altamont Commuter Express rail service. It would offer commuters faster and less costly congestion relief than the California Department of Transportation (Caltrans) plan for a new High Occupancy Vehicle (HOV) lane on I-680, which would take years to build.

Flexible lanes use moveable lane barriers, a system

for borrowing a lane from one side of the highway to add an extra lane in the congested

direction. Moveable lane barriers are already used in New York, San Diego, and elsewhere and could be in place on I-680 within a year.

Operating flexible lanes as Express Lanes-three-person carpool lanes that solo drivers can use for a feecould generate funds for additional Altamont Commuter Express trains. Representative Ellen Tauscher and State Senator Don Perata have endorsed EDF's plan, but Caltrans has been slow to adopt the recommendations.

"EDF will continue to press for more effective and innovative approaches to congestion," said Meg Krehbiel, policy analyst at EDF's Oakland office.

"Bay Area commuters need flexibility and choice, not just more concrete."

E Letter

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National Headquarters 257 Park Avenue South **California Office** New York, NY 10010

Capital Office 1875 Connecticut Ave., NW Washington, DC 20009 202-387-3500

212-505-2100

5655 College Avenue Oakland, CA 94618 510-658-8008

Rocky Mountain Office 1405 Arapahoe Avenue Boulder, CO 80302 303-440-4901

North Carolina EDF 2500 Blue Ridge Road Raleigh, NC 27607 919-881-2601

Texas Office 44 East Avenue Austin, TX 78701 512-478-5161

Council Acts to Protect Dwindling Pacific Fisheries

In response to an emergency petition from the Center for Marine Conservation, EDE and the Natural Resources Defense Council, the Pacific Fisheries Management Council recently adopted several measures to protect dwindling commercial fish species. The Council, a regulatory body with jurisdiction over Federal fisheries, includes representatives from the commercial fishing industry and some state and Federal agencies, but none from environmental or consumer groups.

The bocaccio rockfish, whose population is just 2% to 4% of historic levels, is of particular concern. The Council set lower harvest limits for bocaccio in Federal waters and encouraged the California Fish and Game Commission to place more stringent reductions on sport-fishing in state waters. It will also consider "spatial management," which would greatly restrict or ban bocaccio fishing in certain defined areas and would be a step toward the "no-catch" marine reserves EDF has long advocated.

"Although the state rejected the sportfishing reductions, we hope that sport fishermen will voluntarily reduce their catch of bocaccio and support marine reserves," said EDF scientist Dr. Rod Fujita, who helped draft the petition. "Marine reserves would most likely improve recreational fishing conditions by providing bigger, healthier fish and more concentrated populations."

Fujita noted that five years ago EDF predicted the serial depletion of Pacific fisheries, which started with species such as Pacific Ocean perch and then moved to other fish such as bocaccio and ling cod, now both below 10% of historic levels. This "domino effect" occurs because fishing boats generally capture many species together, both productive and less productive stocks. Since all are caught at the same rate, the less productive stocks decline one after the other. Only when officials set catch limits by taking a broad regional view and create marine reserves will serial depletion be brought under control.

> **Project Offices** 6 Faneuil Hall Marketplace Boston, MA 02109 617-723-2996

10951 West Pico Boulevard Los Angeles, CA 90064 310-441-5604