**ENVIRONMENTAL DEFENSE** 

Vol. 37, No. 4	September 2006
	Midnight moves on the Hill 3
	Can coal clean up its act? 4
	Farmers and the Chesapeake 7
	A utility gets the picture 8
	Paper or plastic? 10



On maneuvers

The military holds the key to a rare songbird's recovery. Our agreement to restore habitat for the golden-cheeked warbler has been called a model for military bases nationwide. **12** 

# Victory for the Outer Kingdom

Solutions

We help create the world's largest marine protected area in the Northwestern Hawaiian Islands

President Theodore Roosevelt established our nation's first national monument, Devil's Tower, in Wyoming in 1906.

He went on to designate 17 other monuments, including the Grand Canyon, earning him a reputation as the father of America's national parks.

In June, President

Bush took a similarly bold step for the oceans, announcing the establishment of the largest marine protected area in the world. The new Northwestern Hawaiian Islands Marine National Monument encompasses a biologically rich string of islands and atolls that stretch 1,200 miles northwest of the main Hawaiian Islands.

The action will safeguard more than 84 million acres of marine wilderness, an area larger than all of America's national parks combined. "This is huge," says our president Fred Krupp, who took the case for the islands' protection directly to the president this spring. "It's as important as the establishment of Yellowstone."

The region includes the world's most

1906. Hawaiian monk seals, tiger sharks and Northwestern Hawaiian Islands national monument Islands national monument

HAWAI'I

As a national monument, the archipelago will enjoy the highest

level of government protection. Fishing will be phased out in five years and coral mining prohibited. The area will remain open to Native Hawaiians for traditional uses and for scientific research.

remote coral reefs and supports more than 7,000 species, including endangered

The designation culminates nearly a decade of work by Environmental Defense and local allies. "The monument is an extraordinary victory for the environment and for the recognition of Native Hawaiian cultural practices," says our scientist Dr. Stephanie Fried. The islands are revered by Native Hawaiians.

Despite their remoteness, the islands show signs of stress. Among the first to

Please see Cover Story, p. 2



The endangered Hawaiian monk seal survives nowhere else but around these islands.

## A foolhardy gamble in Texas



When TXU Power, a Texas electric utility, announced plans to build 11 conventional coalfired power plants that would spew out more carbon dioxide pollution

than 21 states, it was betting on a future devoid of global warming legislation. At least in some quarters, it seems, dinosaurs still roam the earth.

Some 150 coal-fired plants are on the drawing boards nationwide. They will be in trouble when Congress caps and cuts carbon dioxide pollution. In order to cut overall emissions, new plants will need to capture or offset all their emissions.

All across America, leading electric utilities are starting to grapple with global warming. Some are investing in energy efficiency to reduce demand. Some are planning coal-fired plants that can capture the carbon and bury it below ground. Others are offsetting their emissions by paying for carbon to be kept out of the atmosphere.

In contrast, TXU's gamble is a dangerous step backwards, out of step with

# Why should TXU Power get a free ride?

others in the electricity sector. In *The Wall Street Journal*, J. Wayne Leonard, CEO of Entergy, contends that utilities that continue to build new plants heedless of carbon dioxide are "putting all mankind at risk." So why should TXU be allowed to get a free ride today and endanger our well-being tomorrow? Environmental Defense strongly opposes this plan. We will remind TXU and its shareholders that they risk being held financially accountable for the utility's increased global warming pollution.

Most important, we will press for a national cap on carbon emissions—and for legislation that ensures that all new coal plants proposed today are held accountable for their global warming pollution.

No doubt some utilities will fight us. But for the health of their business and the health of our children, they should think twice. Doing the right thing has proven time and again to be good for the bottom line.

YOU CAN HELP: Tell board members of America's electric utilities what you think about global warming pollution. Go to: actionnetwork.org/campaign/txu.

Fred Krupp

### A new monument as important as Yellowstone

#### Continued from p. 1

voice concern was Buzzy Agard, a respected elder who first fished the area in the 1940s. He soon noticed fish were disappearing. "I realized I was helping destroy this unique place," he says. In recent years, research vessels have added to the problem by dumping raw sewage in the area.

Fried teamed up with Agard and helped develop a network (*hui*) of Native

Hawaiians, fishermen, divers and local activists to promote protections. Together, we placed the issue on the agenda in Washington, bringing local partners to testify there.

The *hui* mobilized citizens to speak at more than 100 public meetings and submitted more than 110,000 messages to officials. "Stephanie did the scientific

> research to provide the basis for the actions we asked for," says Vicky Holt Takamine, president of the 'Ilio'ulaokalani Coalition.

In 2000, the *hui* convinced President Clinton to designate the area as an ecosystem reserve. We also persuaded Governor Linda Lingle to withdraw her initial opposition and, last year, to ban fishing in state waters. Bush's action builds on those efforts. "Our work isn't over," says Fried. "Monitoring will be crucial to ensure creation and enforcement of strong regulations."

Still, it's a time to celebrate. Says Buzzy Agard: "This gives me hope that my grandchildren will actually see the marine life I saw, without having to read about it in a book."



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James Watt/NOAA

Blueprint for restoration: The islands contain the most intact coral reef ecosystem on the planet.



## MAILBAG

#### Editor:

I am always happy to see articles such as "The learning tree" (June *Solutions*). Yet one thing that seems to be missing about how to positively impact our environment is simply to buy less stuff! If we buy less, and buy from local producers, we will increase our positive impact.

Charly Drobeck, Tesuque, NM



#### Editor:

Regarding "London's answer to gridlock" (June *Solutions*): How does London impose and collect the congestion fee? Are you bringing this idea to the attention of U.S. cities? Henry Hammond, Boston, MA

### Andrew Darrell, director of our Living Cities program, responds:

To ensure convenience, London's system is entirely automatic, capturing license plate numbers as vehicles head into the central city. Tolls are debited from pre-established accounts, or drivers have until midnight to pay through text messaging, over the Internet, or at select stores. London's mayor has now proposed that the fee be based on a vehicle's carbon emission, with gas-guzzlers paying as much as \$46 a day.

We are conducting a study of such a system for New York City, which our preliminary estimates show would reduce tailpipe pollution and traffic congestion substantially. Our partners include a broad range of business and community organizations. Other cities choked with traffic are beginning to look at the idea too, including San Francisco and Boston.

WE WANT TO HEAR FROM YOU! See addresses at left.

## Washington watch

## Late nights ahead on Capitol Hill?

"Congress could end up making big decisions at midnight," notes our legislative director Elizabeth Thompson, "Just like students who wait until the last minute to do their homework." As elections loom, Washington has focused on issues more symbolic than substantive, but Congress still could act on measures to determine the fate of our climate, wildlife and oceans for years to come.

Here's what we're expecting for the last half of the year:

### **Global warming:** Signs of progress

Senator James Inhofe (R-OK), the Senate's leading climate skeptic, held a hearing on technologies to reduce global warming pollution—a sign of how much the politics of the issue have changed in recent months. A bill to cap pollution from power plants, introduced by Senators Carper (D-DE) and Alexander (R-TN), continues to draw bipartisan support. And if the Senate takes up energy legislation, Senators McCain (R-AZ) and Lieberman (D-CT) could offer their Climate Stewardship Act as an amendment, which would mandate economy-wide reductions.

### **Endangered Species Act:** No news is good news

The Senate environment committee shows no signs of letting Rep. Richard Pombo's destructive Endangered Species Act reform bill (which passed in the House) see the light of day. Environmental Defense is pressing key Senate allies to stand firm.

## **Oceans:** One step forward, one step back

The Senate unanimously approved the Magnuson-Stevens fisheries act, which sets national ocean policy. It reflects our recommendation to promote "catch shares," a conservation method that assigns fishermen percentage shares of the allowable catch.

Unfortunately, the Bush administration proposed a measure that



It's getting hotter and hotter. Congressional action on global warming is long overdue.

would encourage fish farming in the open ocean without adequate environmental controls. We have teamed up with fishing organizations to push for scientifically based aquaculture standards.

Do you feel strongly about these issues? Our campaigns need Strategic Partners. If you are interested in influencing future victories by helping in our lobbying efforts, please contact Wendy Sommer at 202-572-3324.

# In depth

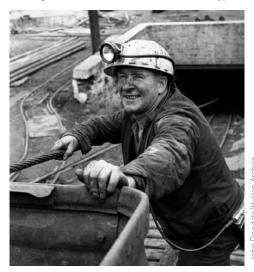
### **Coal's resurgence** CAN AMERICA LIVE WITH THIS FOSSIL FUEL IN THE 21st CENTURY?

The 19th century was powered by coal; the 20th century by oil. The 21st? Well, by 2100, the International Energy Agency expects half the world's energy to come from coal. Again.

Oil is expensive, scarce and entangled in dangerous geopolitics. Coal is cheap and abundant, especially in the United States, which has three times the energy in its coal reserves that Saudi Arabia has in its oil.

But how can we live with the dirtiest of all fossil fuels? Coal mining is destructive and dangerous. Burned conventionally and without modern pollution controls, coal releases perilous amounts of neurotoxic mercury, plus sulfur and nitrogen oxides and particulates that contribute to respiratory and cardiac illness.

Coal also emits more carbon dioxide per BTU than virtually any other energy source. (Carbon dioxide is the major pollutant causing global warming.) Over the next 20 years, power companies worldwide are planning to build enough new coalfired plants to produce 1,400 gigawatts of energy; that's four times the total number of coal plants operating in the U.S. today. If those plants use conventional technology,



People have mined coal since about 1000 BC.

their carbon emissions will equal the total emitted since the dawn of the industrial revolution.

Technologies do exist to burn coal much more cleanly, including capturing carbon dioxide and sequestering it underground. The obstacle is money: Currently, these cleaner plants cost



Today, 40% of the coal burned in America is mined in Wyoming's Powder River Basin. At what price to the landscape?

more to build, however some of these costs can be offset by using the captured carbon dioxide in enhanced oil recovery projects.

They cost more, that is, if you disregard the value of reducing carbon pollution. Since the enactment of carbon caps in Europe, Japan and the northeastern United States, companies can profit by finding ways to reduce carbon emissions. Once you put the value of reducing carbon into the balance sheet, the competitive outlook for cleaner coal plants as well as renewable energy sources and conservation—suddenly improves.

That's what happened last year, when Xcel Energy in Colorado announced plans to buy 2,500 megawatts of new electric generating capacity (enough for 2.5 million homes). Environmental Defense, Western Resource Advocates and local citizen groups showed Xcel a prudent way to account for the future financial liability of carbon pollution: Xcel would compare bids from competing power producers only after adding in \$9 for each ton of carbon dioxide those producers would emit.

Using that new accounting, Xcel announced in December a "Least-Cost Resource Plan" that includes 775 megawatts of new wind energy and 320 megawatts of energy efficiency investments, the biggest commitment to clean energy resources in Colorado history.

Xcel also is working on an advanced coal-fired power plant that would capture and sequester carbon dioxide, a project that recently won the support of state lawmakers.

### FACTORING IN HEALTH

Leading utilities nationwide are getting serious about global warming pollution, thanks in part to a string of Environmental Defense victories over the past year. We helped win carbon limits in California and eight northeastern states, argued successfully for a U.S. Senate resolution in favor of a national carbon cap and teamed up with allies to persuade the Supreme Court to decide whether EPA has the authority to regulate carbon dioxide under the Clean Air Act.

The market's dawning recognition that carbon dioxide belongs on the balance sheet has begun to influence the energy picture in the West. Environmental Defense scientist Dr. Jana Milford and our western partners showed that California was buying out-of-state energy that didn't meet its own global warming and clean air standards. Sacramento responded by proposing new policies to extend its global warming pollution standards to all electricity imports, and by signing a deal to help Wyoming win federal funds for a zero-emission coal plant *(see box)*. Meanwhile, a San Diego utility scrapped plans for conventional coal plants in Idaho and Nevada, and a New Mexico coal plant was put on hold because the owner had not taken a serious look at advanced coal technologies.

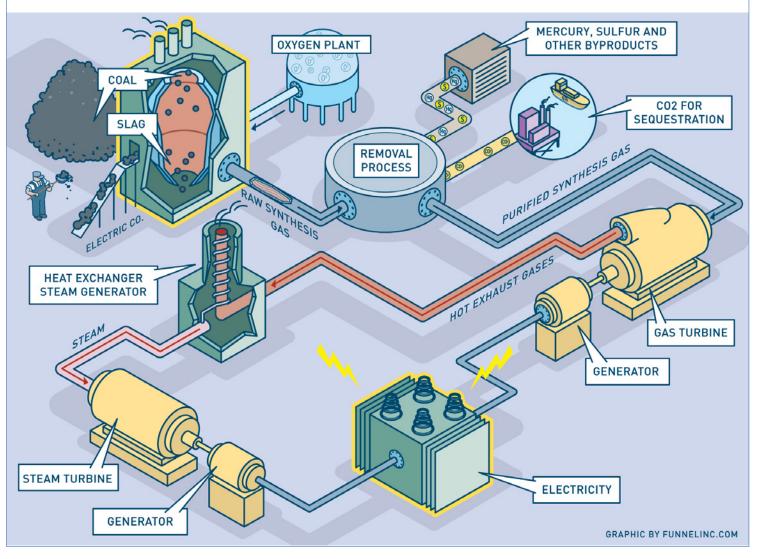
While Environmental Defense supports companies honestly grappling with climate and carbon, some companies, such as TXU Power, persist in ignoring carbon (see *Where we stand*, page 2). We will alert the financial community to the investment risks and work to ensure that national legislation rewards early actors who invest in clean energy production and punishes those who increase the cost of solving the problem. So far, we're succeeding: Every bill now under consideration, including those sponsored by Senators Boxer, Carper, Feinstein and McCain, would not grandfather any of the emissions from TXU's 11 new plants.

## A blueprint for low-carb coal

Energy companies are exploring ways to reduce pollution from coal. The most established of these new technologies is Integrated Gasification Combined Cycle. As illustrated, IGCC plants turn coal into gas, which is burned to generate electricity; the heat makes steam to turn a second turbine.

This "combined cycle" is more efficient and cleaner, because pollutants including carbon can be removed before combustion; the carbon can then be permanently stored. None of the 100 IGCC plants currently operating worldwide (including two in the U.S.) currently capture their carbon. But oil companies have been injecting carbon dioxide into the ground to improve oil recovery for thirty years, and this "geological sequestration" is now being tested on a big scale. Environmental Defense energy specialist Scott Anderson, a former oil executive, is working with regulators and corporations including BP (which will sequester the carbon from a new IGCC plant in Carson City, CA) to develop safety protocols.

The ultimate goal is zero emissions. IGCC plants can burn crop waste along with coal. Because growing plants absorb carbon, sequestering the combined emissions could actually subtract carbon from the atmosphere.



# Regional update

## New lease for Florida reefs

Florida contains the northernmost coral reefs in the Western hemisphere, and these reefs face a multitude of threats.

Every year, for example, lobbyists for developers descend on the Florida Legislature with plans to bury nearshore reefs with massive, new dredge projects. These projects use taxpayer dollars to subsidize more beachfront construction. Dredging clouds water and buries reefs.

Working with several government agencies, we have protected 200 acres of reefs at six east Florida sites. Traditionally, coastal management in Florida has been controlled by a small group of consulting engineers, and other ocean users have lacked a voice. Key to our success was building non-traditional partnerships and giving a voice to fishermen, sea turtle groups, surfers and conservative antitax advocates frustrated by the waste of taxpayer dollars.

Our scientist Dr. Ken Lindeman published the first

### Linking science and grassroots outreach

research on the fishery value of Florida nearshore reefs and then empowered influential grassroots groups. "Our work to protect reefs has been aided in many ways by Environ-

mental Defense," said Captain Rodney Smith, a veteran fishing guide.

Once again linking science with grassroots outreach, this winter we won another victory in the Dry Tortugas National Park, protecting 46 miles of coral reefs. When combined with the adjacent Florida Keys National Marine Sanctuary, this area becomes the largest fully protected shallow coral reef reserve in North America.



Should nearshore reefs suffer to enable more unsustainable beachfront construction?



Our plan rewards landowners for the many public benefits of preserving forests.

## **Endangered:** America's family-owned forests

The southern United States produces more timber than any other region in the world. But its forests are increasingly at risk. "Realtors call all the time wanting me to sell," says Anne Royster, whose 305-acre forest north of Raleigh has been in her family for more than 100 years. "I don't want to sell my forest, but I need some help to keep it."

Families manage 70% of southern forests. As they struggle, industrial landowners like International Paper are selling off millions of acres of timberland, throwing the future of forest management into doubt.

Environmental Defense has released a study, Standing Tall, that reveals southern forests are projected in the next 30 years to lose 30 million acres of trees-an area the size of New York State. To stem the destruction, we recommend rewarding

landowners for the public benefits from forests: clean water, clean air, biodiversity and recreation.

Currently, private landowners in North Carolina who preserve their forests pay higher property taxes than those who cut them down for timber.

We're pressing for property tax relief for those who practice conservation. We also are working to

### "I don't want to sell my forest, but need help to keep it."

increase support for forests in the federal Farm Bill.

Our allies include landowners, foresters and recreation groups. "If we want to preserve this natural resource, we need to work together," says our forestry specialist Will McDow.

### Saving sea turtles: CELEBRATING A QUARTER CENTURY OF PROTECTION

This year more newly hatched Kemp's ridley sea turtles made the perilous scramble across Texas beaches to begin their lives at sea than at any time in recent memory. Only 20 years ago these remarkable rep-



Kemp's ridley hatchlings: A testament to the effectiveness of the Endangered Species Act.

tiles had all but disappeared from their traditional nesting beaches, victims of the turtle trade in the 19th century and, more recently, frequent drownings in shrimpers' nets and the plundering of nesting sites.

The record Kemp's ridley numbers—100 U.S. nests so far this year, up from one in 1979—would not have been possible without protection of nesting beaches and regulations such as those Environmental Defense fought for in the 1980s to install "turtle excluder devices" (TEDs). These hatch-like devices allow sea turtles—but not shrimp—to escape from shrimp nets. At that time a U.S. government survey estimated that 44,000 Kemp's ridley, loggerhead, green, hawksbill and leatherback sea turtles, all endangered or threatened, were drowning in shrimp nets in U.S. waters each year.

Environmental Defense was involved in negotiations with fishing

leaders in the Gulf and Atlantic shrimp fleets to reach consensus on TEDs. When the shrimpers walked away from the talks, claiming the new regulations would cut down their catch, we threatened to sue. Later, some in Congress tried to prevent adoption and enforcement of the rules, and we helped broker a compromise that called for a National Academy of Sciences study, which endorsed the regulations. Environmental Defense also leveled the playing field by helping persuade Congress to pass a ban on foreign shrimp caught without TEDs.

Nevertheless, the rules faced considerable hostility and non-compliance at first. On some occasions, government officials had to attend meetings accompanied by armed guards. "Over time, however, the shrimpers adjusted," says attorney Michael Bean, who led our efforts. "It's rewarding for us all to see the results."

## Farmers help to heal the Chesapeake Bay

Pennsylvania's Lancaster County is celebrated for its Amish community and its agricultural productivity. It also is a major source of nitrogen fertilizer runoff that contributes to vast dead zones in the Chesapeake Bay. To help heal the nation's largest estuary, Environmental Defense joined forces with farmers. We introduced new technologies that reduce fertilizer use and save farmers money.

"I'm not a radical environmentalist, but I believe we are to be good stewards of what is entrusted to us," says Matt Young, one of our partners and a dairy farmer in Peach Bottom, PA.

Our goal is to cut the amount of nitrogen by two-thirds within three years. This ambitious reduction is achievable because most area farmers had not been testing their soils to determine exactly how much fertilizer is needed. They worked from averages, and often added extra as a buffer. Applying excess fertilizer not only wastes farmers' money but also harms the environment. The county's crops can absorb only about half of the 66 million pounds of manure and commercial fertilizer farmers apply. The excess washes into the Susquehanna River and eventually Chesapeake Bay, where the nitrogen fuels massive algae blooms. The bay's

oysters, a key indicator of ecosystem health, have fallen to 3% of historic levels, in part because of dead zones.

Our project already is showing results. About 60 farmers are testing nitrogen levels in their soil and cornstalks, and many have cut their fertilizer use. The technology is used on farms in the Midwest, but is rare here. A \$580,000 grant from the National Fish and Wildlife Foundation will help us scale up the program to 350 farmers on 42,000 acres.

Matt Young was one of the first to try the tests and cut his fertilizer use. "Environmentalists and farmers are not enemies," he says. "We can work together. Environmental Defense proved that."



A return to a simpler time: Amish and "English" farmers are cutting excess fertilizer use.

## The battle over "takings" could remake the West



Should the government have to pay a developer to protect this national monument?

What if the water commissioner who limits construction near her town's reservoir had to pay landowners for the houses that couldn't be built? Clearly, that would sabotage government's ability to protect the environment and public health.

Astonishingly, a 2004 ballot measure approved by Oregon voters is having a similar effect. Measure 37 says that if a government agency enacts a regulation that limits a landowner's use of his land—say, to protect the environment or manage growth-then the government must either exempt the property owner from the regulation or pay for the loss in economic value.

The effect has been a cascade of claims and nearparalysis of environmental efforts. Thousands of claims

seeking more than \$1 billion have been made against Oregon cities and counties. This summer, a developer demanded either \$203 million or the right to drill geothermal wells, expand a pumice mine and build a vacation-home subdivision within the boundaries of Newberry National Monument.

Voters in Arizona, California, Idaho,

Montana, Nevada and possibly Washington State will vote on similar "regulatory takings" initiatives this November. The name reflects proponents' view that regulating property is tantamount to taking it without compensation. Few of these initiatives are home-grown. Rather, they are funded by national groups like Americans for Limited Government. Environmental Defense is part of a broad coalition of groups and local governments launching public campaigns to educate citizens about the real price they will pay for such bills.

"These takings initiatives threaten the very foundation of environmental protection," says Dan Grossman, a former Colorado state senator who is our new Rocky Mountain regional director. "Funded by a wealthy developer from New York, these proposals undermine communities' efforts to save habitat and open space."

## Entergy recommits on global warming

While some businesses are shy about taking action to reduce their global warming emissions, Entergy has no commitment phobia. Five years after joining us in an agreement to hold their emissions to 2000 levels (the first U.S. electricity producer to do so), the New Orleans-based company is re-upping: committing to keep their greenhouse gas emissions at 20% below 2000 levels through 2010.

"The idea here is to move toward Kyoto levels," said Brent Dorsey, Entergy's corporate environmental programs director. "We have targeted 1990 levels as a long-term aspiration."

The company also has expanded its agreement, mandating that reductions cover not just emissions generated by Entergy itself, but also emissions from electricity purchased from other producers.

Initially, Environmental Defense helped Entergy set emissions targets and assess the environmental value of

offsets, but now our partnership is expanding. We will work together to study the physical and financial impacts of global warming on utility operations and lobby for effective global warming legislation using cap-and-trade.

Entergy's success at reducing its carbon footprint and beating its target

is remarkable given the company's increased generation to meet growing demand. It succeeded by employing new technologies and production efficiencies as well as by buying offsets, including carbon sequestration credits from no-till farms.

"Entergy is getting some real firstmover advantage," said Mark Brown-

stein, our director of business partnerships for climate. "They're locking up some of the most cost-effective reductions now and are at the forefront of creating a new market. That's a good message to tell your investors, that you're being savvy—you're buying ahead of the curve."



The New Orleans-based utility Entergy points to Katrina as proof that companies shouldn't wait to act on global warming.

## **NEWS BRIEFS**

## Supreme Court hands down a murky decision on wetlands



avmond Gehman/National Geographic

At risk: Millions of acres of prime wildlife habitat.

The nation's wetlands narrowly escaped losing key protections under the Clean Water Act this summer when the Supreme Court ruled on a case involving two Michigan developers. At issue was whether the court would void 30-yearold rules that protect nearly all the country's rivers and wetlands.

Justice Anthony Kennedy pro-

### Low-sulfur diesel fuel is here at last

Thanks to a decade of bipartisan work, the biggest reductions of harmful diesel pollution in American history have finally begun.

Environmental Defense worked with EPA on a rule requiring a 97% reduction in the sulfur content of highway diesel fuel. This fuel directly reduces harmful pollution and enables the use of advanced engine technology in new heavy-duty trucks and buses. Starting with 2007 models, these vehicles must emit 90% less soot and smog-forming pollution. For older models, the cleaner fuel allows retrofits with modern pollution controls.

We teamed up with Earthjustice to defend the standards against industry challenges and with the American Lung Association to spur EPA to propose additional standards for diesel construction and farm equipment.

Diesel pollution contributes to heart attacks, asthma attacks, strokes and

vided the pivotal opinion, holding that the Act protects wetlands only if the Corps of Engineers can show they have a "significant" connection to downstream water quality. "The proof is there," says our attorney Tim Searchinger, "but the decision creates a bureaucratic headache and gives those who would drain and develop wetlands a political opportunity to create mischief."

This summer, Environmental Defense convened a blue-ribbon group of scientists to help compile the evidence to satisfy Justice Kennedy's definition.

The high court also agreed to hear two high-profile environmental cases this fall, involving EPA's authority to regulate global warming pollution and pollution from old power plants under

premature death. "Reducing diesel pollution," says Dr. John Balbus, our Health program director, "is among the most important measures we can take to protect human health from dangerous airborne contaminants." EPA estimates that annual expenditures of about \$4 billion will bring \$70 billion in environmental and health benefits each year.



With 94% of U.S. freight moved by diesel, the new fuel will yield major health benefits.

the Clean Air Act. Environmental Defense is a party in both cases.

# Removing obsolete dams on Long Island



Rossellini: "I want to preserve the beauty we have and restore what was lost."

On a rainy day this spring, film star Isabella Rossellini stood before flashing cameras in the town of Brookhaven on Long Island and made a dramatic announcement: "We want to make a dream happen. We want to open up these rivers."

These weren't lines from a new movie. Rossellini, a local resident and supporter of Environmental Defense, joined us to announce an ambitious new initiative: Working with local officials, we plan to restore 30 miles of rivers on the island within 10 years. We have secured \$1.5 million in state funding to launch the project.

The rivers once ran fast and cold, teeming with silvery alewives headed inland to spawn. Now they are blocked by dams and threatened by development. The number of alewives has plummeted, leaving ospreys and other wildlife without a key source of food.

By removing obsolete dams, installing fish ladders and protecting streamside land, our scientists will revive some of Long Island's natural heritage. "I've lived here for 20 years and seen dramatic change," said Rossellini. "I want to preserve the beauty we have, and restore what was lost."

# Green living

### Facts behind the myths

#### **On diapers**

Mothering magazine's interesting timeline on the "politics of diapers" is at mothering.com/articles/ new\_baby/diapers/politics.html.

The British Environment Agency commissioned a study of the environmental consequences of cloth versus disposable diapers that concludes, "We believe that people should be free to choose whatever nappy suits them." See the study at environment-agency.gov.uk/ yourenv/857406/1072214/.

A study by a Dartmouth College professor for the Sustainability Institute concludes, "From the earth's point of view, it's not all that important which kind of diapers you use. The important decision was having the baby." Sustainability Institute, 3 Linden Road, Hartland, VT 05048, (802) 436-1277, sustainabilityinstitute.org.

#### On bags

For an in-depth look at the secret life of garbage bags and other recycling facts, pick up *Paper or Plastic: Searching for Solutions to an Overpackaged World*, by Daniel Imhoff (Sierra Club Books, \$16.95).

#### On dishwashing

For more on the environmental impacts of household technology, including information on hand versus automatic dishwashing, visit www.landtechnik.unibonn.de/ifl\_research/ifl\_research \_projects.php?sec=HT.

### On idling

Car Talk's lively take on idling your engine and other driving practices can be found at cartalk.com/content/features/fueleconomy.

### ENVIRONMENTAL ANXIETY SETS IN EARLY.



## Which is better...? FOUR EVERYDAY CHOICES FOR THE ENVIRONMENT

Everyday choices we make in our lives make a difference for the environment, but sometimes the choices are not clear-cut. Even complete lifecycle analysis may not provide the final word on the four issues we explore below, but mainstream thinking continues to evolve. Here's the latest:

### Cloth or disposable diapers?

With about 8,000 diaper changes for the average baby, it's not surprising that parents get impassioned about this one. Ten years ago, disposable diapers were a definite no-no for committed environmentalists, but recent studies suggest it's not that simple. Disposables (which use 1.3 million tons of wood pulp annually) consume more raw materials and generate more solid waste. Cloth diapers (which can be reused as many as 150 times) soak up more energy and water and contribute more to atmospheric emissions and water pollution. There are concerns about the chemicals released by disposables and skepticism about the "biodegradable" claims made by some manufacturers. The debate might tilt towards disposables where water is scarce and cloth where landfill space is scarce. Otherwise, use what works for you.

### Paper or plastic bags?

There is ample ammunition on both sides of this debate too. The production of plastic grocery bags from non-renewable polyethylene plastic (a crude oil byproduct) consumes 40% less energy than making paper bags. But in landfills paper bagsmade from renewable trees-decompose, while plastic could still be around in 1,000 years. Paper bags use up more landfill space, but are much more likely to be accepted for curbside recycling (about 20% of paper bags are recycled; only 1% of plastic bags are). In fact the best answer to the question, "Paper or plastic?" is, "Neither, thank you." You can best protect the environment by bringing your own reusable cloth bags when you go shopping. Some

Guest columnist Jim Motavalli is editor of E/The Environmental Magazine (for subscription information: 800-967-6572 or emagazine.com). Opinions are the author's and not those of Environmental Defense staff. enlightened stores will even give discounts to customers who bring in their own bags.

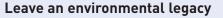
### Hand wash or dishwasher?

Do dishwashers waste water and energy? Not according to the University of Bonn, where a study last year found that dishwashers use half the energy and one-sixth the water of hand washing. Of course, this assumes you wash only full loads, lower the water temperature and use the energy-saving "no heat, air dry" cycle. Some dishwashers, including a variety of European models, receive high ratings for both energy efficiency and water savings. The bottom line on cost, according to the U.S. Department of Energy: "Washing dishes by hand several times a day can be more expensive than operating an energy-efficient dishwasher."

### Idle your engine, or switch it off?

Should you "warm up" your car on cold mornings? Should you let it idle if you are stopping somewhere for just a few minutes? The answer to both these questions is a resounding "No." Idling your car for more than half a minute uses more gas than it takes to restart the engine, says the National Safety Council. NPR's "Car Talk" hosts Tom and Ray Magliozzi, add that gentle driving is the best way to ease your car into life. In fact, modern cars do not need to be warmed up except in the coldest of weather (even when the temperature is below 10° F., cars need at most a minute to run smoothly). Long idling is actually bad for your engine, because it results in excess internal carbon buildup.

### By Jim Motavalli





Could there be a more meaningful way to make a difference?

You can create an environmental legacy by including Environmental Defense in your will or estate plan. Your gift will enable us to continue working to curb global warming. It can also give you income tax relief, provide you with lifetime income, and avoid capital gains tax liability.

To learn more, call toll-free 877-677-7397 or write Anne Doyle, Environmental Defense, 257 Park Avenue So., NY, NY 10010 or at ospreys@environmentaldefense.org.



## THE TICKING CLOCK ...

**Rising temperatures mean more forests ablaze in the West** A sharp increase in large wildfires in the West since 1987 is the result of rising temperatures that melt snowpacks earlier and create longer dry seasons, says a new study to be published in *Science*. The average fire season has lengthened more than two months and forest fires have increased fourfold in the region, the study finds. Until recently, the more frequent blazes were attributed to forest management (for example, decades of fire suppression), but the study shows global warming is at least partly to blame.

The study notes that temperatures from 1987 to 2003 in the 11 states surveyed were the warmest since 1895, when record keeping began. Co-author Steven Running of the University of Montana says, "To me, it's the equivalent of the hurricanes on the Gulf Coast. This is our hurricane."

#### Warmer seas are devastating coral reefs

Last summer the same hot water that spawned Hurricane Katrina caused the worst bleaching ever of coral reefs from Florida to Panama. A recent federal study confirmed that reefs are under severe stress from higher water temperatures linked to global warming. Bleaching occurs when overheated corals expel the colorful algae that provide them with most of their food. The corals can literally starve to death. In 1997-98 about 16% of the world's coral reefs were severely damaged or killed by hot water.



The sharp increase in wildfires is a harbinger of global warming.

Another recent study casts a small ray of hope: at least some coral species, in the right conditions, may be able to adapt to warmer conditions. The researchers say the acclimation process may "buy time while measures are put in place to reduce greenhouse gas emissions."

#### African farm failures linked to global warming

A new study in the proceedings of the National Academy of Sciences finds that over the past 40 years food production in Africa dropped dramatically during years associated with El Niño, the warm ocean currents linked with unusually hot weather. El Niño is likely to become more frequent as global warming progresses. The study found that African production varied enough to feed—or not feed—20 million people in the region, which is already beset by desertification.

### Can tanks and songbirds coexist? U.S. ARMY COMES TO THE RESCUE OF AN ENDANGERED WARBLER IN TEXAS

The Department of Defense controls 28 million acres—land that is home to more endangered species than our national parks. But the Pentagon often has won exemptions from species' protections, claiming they interfere with training. Now, a novel program Environmental Defense helped design in Texas gives the Army flexibility while dramatically boosting an endangered songbird's prospects for recovery.

Sprawled across more than 200,000 acres in the Texas Hill Country, Fort Hood is the nation's largest Army base. It is also home to the world's largest nesting population of endangered golden-cheeked warblers. But there's a problem: "Firing large caliber weapons and maneuvering Bradley fighting vehicles is not real good for habitat," says the base's assistant chief of staff Ron Perry.

In 1996, a wildfire destroyed a quarter of the bird's Fort Hood woodlands. Another such fire could force the base to curtail training to preserve other areas. "That is not a good thing," says Perry. "We've got to train our soldiers."

In partnership with Texas A&M, the Texas Cattlemen's Association and others, Environmental Defense designed a program that will give Fort Hood credits



Budding birdwatchers.

for restoring warbler habitat on private lands off post. The credits will go into a "bank" that the base can tap if habitat is harmed. "It's an insurance policy for us," explains Perry.

Landowners like it too. They get financial assistance—\$500,000 this year—for helping improve

warbler habitat, such as by reducing erosion or adding fences. A number of ranchers are "in the chute," says Steve Manning, a fifth-generation cattle rancher who helped develop the program. "We're not going to have a problem finding willing participants."

### AN ECOLOGIST'S DREAM

The project may also be the best hope for the warbler, according to our scientist David Wolfe, who chaired the scientific committee that designed the system. The tiny songbird winters in Mexico and Central America, but it breeds exclusively in central Texas. Its numbers have dwindled as development devours the juniper and oak forests where it nests. To recover, it needs viable populations across its breeding range, almost all of it private land.

To achieve that goal, the program awards more credit for restoring habitat where it's needed most. For Wolfe, it's an ecologist's dream come true: "You rarely get to target restora-



The warbler nests exclusively in juniper forests in central Texas.

tion work across a species' entire breeding range. With this program, in 10 years this bird could be close to recovery."

Meanwhile, the Pentagon is interested in our project as a national model to reduce military-species conflicts elsewhere. "Nothing like this has been tried before, but we believe it absolutely could work at other bases," confirms Perry.

### What they are saying about Environmental Defense

"Environmental Defense wants chicken farmers to stop using antibiotics to spur growth. It wants strict controls on the budding field of nanotechnology. It wants fewer gas guzzlers on the road.

Not long ago, when it was still the in-your-face Environmental Defense Fund, the group would have looked for a company to sue, boycott or at least protest. Nowadays, it is looking for companies that can help it out."

-The New York Times, May 17, 2006

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