



> EARTH TO SENATE: GET MOVING!
page 4

> TOXIC IGNORANCE IS NOT BLISS
page 5

> BRIDGING THE U.S.-CHINA DIVIDE
page 16

SOLUTIONS

Vol. 40, No. 4 Fall 2009



> **SHARING THE CATCH**
Fishermen embrace a new approach to solve overfishing
page 6

WHERE WE STAND

By EDF President Fred Krupp

FROM WASHINGTON TO BEIJING, THE TIME FOR CLIMATE ACTION IS HERE



I recently spent a quiet weekend in Vermont. Over pancakes one morning, I found myself thinking about the fate of the state's maple sugar industry, which supports many farmers and woodlot owners.

Global warming now threatens the sugar maple. Rising temperatures will likely push these beautiful trees farther and farther north, possibly, some scientists say, driving them entirely out of the Northeast.

Imagining New England without maple syrup is like imagining New Orleans without jambalaya, but it's just one of many changes global warming may have in store for us unless the United States Congress takes the lead by enacting a climate bill.

The House did its part in June, when it passed a good bill, and now it's the Senate's turn. To get swift action there we must impress on every Senator the words of economist Paul Volker, who said that without action on global warming, the economy will "go down the drain in the next 30 years."

To reach the Senate, EDF helped to launch Clean Energy Works (*see story, p. 4*) a "war room" type effort to coordinate a unified climate bill campaign. This is an unprecedented coalition of some 60 labor, religious, environmental, veterans and

other groups. In my 25 years at EDF there has never been anything like it.

China too must act. It and the United States are the two largest global warming polluters, but each says to the other, "You first" when it comes to addressing the problem. In fact, China's rapid growth in emissions has been a key sticking point in Congress. Now EDF has helped to engage China's business community on global warming (*see story, p. 16*), just as we engaged U.S. corporate interests earlier.

There's evidence our strategy is working in the Senate, where several fence-sitters recently announced their support for climate legislation.

In my 25 years at EDF, I've never seen anything like this coalition.

Still, we must not underestimate the opposition. Powerful vested interests including ExxonMobil and the U.S. Chamber of Commerce are determined to block climate legislation. They don't want any restrictions on their ability to foul the atmosphere. The good news is that four major companies—Apple, Exelon, PG&E and PNM Resources—have recently left the Chamber of Commerce because of its head-in-the-sand position.

We need climate legislation now to stop the devastating changes to our environment. And we need it to transform our ailing economy and create millions of new jobs.

If you haven't contacted your Senators lately about this issue, please do it today.



Finding the ways that work

Environmental Defense Fund's mission is to preserve the natural systems on which all life depends. Guided by science, we design and transform markets to bring lasting solutions to the most serious environmental problems.

Our work is made possible by the support of our members.



ON THE COVER:

Old fishery management methods—like shorter fishing seasons—have failed to end overfishing.

But a new idea, catch shares, is helping both fisheries and fishermen.

Solutions senior writer Rod Griffin went to sea with Rhode Island fishermen in search of summer flounder and brought back a firsthand report of catch shares in action. *See page 6.*

Cover photo: Matt Ward/Pacific Stock

SOLUTIONS

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FEEDBACK

LETTERS AND COMMENTS FROM OUR MEMBERS

Climate bill compromise?

Your Summer 2009 *Solutions* celebrates the House passage of the American Clean Energy and Security Act, hailing it as an historic victory. Yet [this] Waxman-Markey bill calls for only a minor reduction in greenhouse gas emissions by 2020, as opposed to the Intergovernmental Panel on Climate Change, which calls for a 25–49% reduction. Also, the bill is paving the way for new coal-fired plants instead of phasing them out. Can you explain your response?

Sally Ross, New York, NY



Photo construction

Keith Gaby, our climate communications director, responds:

We actually think the American Clean Energy and Security Act is a very strong first step toward solving the climate crisis. Under this bill, global warming pollution would be reduced by 17% by 2020 and 83% by 2050—or about two billion tons of pollution per year.

But like any major legislation, passing the bill required compromise (it passed the House 219–213). We fought successfully to maintain strong pollution reductions, but also recognized that if the bill failed it would kill international climate negotiations and allow companies to continue polluting without limit. So we didn't have the luxury of insisting on every provision we preferred.

Landmark laws like Medicare and the Clean Air Act started out with an imperfect first step, followed by significant strengthening amendments over time. That is the nature of progress in Washington. And with scientific warnings becoming more ominous by the day, we have no choice but to start immediately.

Growing native plants

In "Way beyond business as usual" (Summer 2009 *Solutions*) you lauded the high-tech [irrigation] activities of Hydropoint and its contributions to water conservation. Better yet, grow plants that are native to the area. They normally require little, if anything, in the way of irrigation, fertilizer or pesticides. Use of native plants not only conserves resources but promotes natural biodiversity as well.

Paul Olexia, Kalamazoo, MI

Eric Holst, our managing director for conservation, responds:

You're absolutely right! Native plants are a great option for gardening enthusiasts and corporate landscapers alike. In the arid western U.S., many native plants are adapted to drought and require less water during the summer growing season.

And yes, native plants provide benefits for local wildlife, particularly pollinators such as native bees and hummingbirds.



Tim Street-Porter/Corbis

Many areas of the country are experiencing a surge of interest in gardening with natives, and as a result plant material and advice are not hard to find. The National Wildlife Federation manages a program called Garden for Wildlife (nwf.org/gardenforwildlife), and many states and regions have native plant societies (plantsocieties.org).

We want to hear from you!
See addresses on page 2.

WHAT THEY'RE SAYING ABOUT EDF

A healthier ride for New York City schoolchildren

New York City's 7,000 school buses spew so much diesel pollution that the air inside the bus is often as much as five times worse than the air outside. EDF attorney Isabelle Silverman decided to do something about it. She coauthored a study and pressed government relentlessly to clean up the buses. In September, the City Council voted unanimously to switch to cleaner school buses.



City of New York

Mayor Bloomberg signs clean school bus law, as EDF's Silverman (far right) looks on.

"Of all the advocates, you were the most helpful, reliable and attentive. The kids are saving a special place in heaven for you!"

—New York City Council attorney Samara Swanston on EDF's Isabelle Silverman



CLIMATE: TIME FOR THE SENATE TO ACT

iStockphoto

In a new TV ad for EDF, Dr. Dan Boone, president of a Christian university in Tennessee, makes an impassioned plea for Congress to pass global warming legislation: “Please somehow find a way to let this global concern rise above partisan politics.”

Dr. Boone’s voice is just one in a growing chorus calling for action as the Senate considers a climate bill introduced by Senators Barbara Boxer (D-CA) and John Kerry (D-MA). Since the House passed similar legislation in June, passage in the Senate would put a bill on President Obama’s desk.

44¢ The price of a postage stamp is the daily cost, per household, of reversing climate change

“After all these years, we’ve never been this close,” says EDF president Fred Krupp. “But we must keep the pressure on.”

Victory in the Senate will require 60 votes, some Republican. That’s a high hurdle, but hopes for bipartisanship rose following the publication of “Yes We Can (Pass Climate Change Legislation),” an editorial in *The New York Times* by Senators Kerry and Lindsey Graham (R-SC). The two men said they were “convinced that we have found both a framework for climate legislation to pass Congress and the blueprint for a clean-energy future that will revitalize our economy.”

Still, opponents are spending millions of dollars to block a climate solution. To counter them, EDF and other environmental

groups have joined religious, labor and veterans organizations in an extraordinary coalition, called Clean Energy Works (CEW).

CEW’s nerve center, on the seventh floor of a nondescript Washington office building, has the feel of a classic political campaign: dozens of campaigners are calling supporters, patching calls into Senate offices, conducting opposition research and speaking to reporters.

EDF’s Washington staff is on full alert. Mark MacLeod, our chief Senate lobbyist, is briefing Senators and their staff almost daily, offering the best science and economics to expose the opposition’s fabrications. EDF economist Dr. Nat Keohane, climate expert Jennifer Haverkamp and Fred Krupp all testified on Capitol Hill in the space of a few weeks.

Our campaign is working. Organizers at our Environmental Defense Action Fund have collected 350,000 postcards and 50,000 letters urging Senators to pass a climate bill now. And the CEW war room has generated huge turnouts at town halls and clean energy events in 28 states. From a veterans’ bus tour in New Hampshire to a faith community walk in New Mexico, people are turning out to push for Senate action.

The leading Washington lobby fighting climate legislation is the U.S. Chamber of Commerce, but in recent weeks Exelon, PG&E, PNM Resources and Apple have all quit the Chamber in protest of its position.

“EDF has never been so engaged on an issue,” said MacLeod. “Getting to a climate bill has been a long haul, but I really believe our final destination is in sight.”



Doug Kapustin

As a vote nears, our coalition’s Climate Campaign nerve center hums with activity.

TOXIC TRAILS

Protecting families from unsafe chemicals



Risk factor: A child plays outside formaldehyde-tainted FEMA trailers.

Consider this fact: The United States imports formaldehyde-laden plywood from China, some of which sickened people forced to live in FEMA trailers after Hurricane Katrina. That same plywood could not be sold in Japan or the European Union—or even for domestic use in China.

EDF biochemist Dr. Richard Denison told that story to members of Congress in a February hearing about reforming America's 33-year-old chemicals law. The Toxic Substances Control Act (TSCA) is considered among the weakest of all major U.S. environmental laws. The law is so weak, in fact, that EPA was unable to use it to ban asbestos, a known human carcinogen barred in more than 30 countries.

200 Number of chemicals, out of **85,000**, on which EPA has required testing

Environmental Defense Fund has been pressing for reform since 1997, when we published *Toxic Ignorance*, our seminal report that exposed the lack of basic health data for even the

most widely used chemicals on the U.S. market. Chemicals that we know too little about are in baby bottles, pet food, toys, even our bodies.

Troubled by the low priority EPA has given to chemical safety, Denison upped the pressure, not by publishing another dense report, but by posting detailed critiques of EPA's program on our blog. The critiques, written in collaboration with EDF toxicologist Dr. Cal Baier-Anderson, were widely read inside and outside EPA. "Using the blog enabled us to keep the message coming, in weekly dollops," Denison says.

Soon after the blog began to appear, EPA announced new principles and initiatives for advancing chemical safety that closely mirror our recommendations. Many observers in the health community say Denison and his blog were key catalysts.

Attention is now shifting to Congress. More stringent laws in Europe, coupled

with a wave of state initiatives and reports of lead paint in toys from China, are fueling the demand for reform. Even the industry now acknowledges that current law fails to ensure the safety of consumer products.

Sen. Frank Lautenberg (D-NJ) and Rep. Bobby Rush (D-IL) plan to introduce bills that would overhaul U.S. chemical regulation. The legislation is expected to require chemical manufacturers to provide health and safety information on chemicals and prove they're safe in order to use them in products.

"Reform is finally within our grasp," says Denison, "but there's still a lot of work to be done." A leader in the Safer Chemicals, Healthy Families coalition, EDF is pushing for passage of strong legislation, working with scientists from companies like Staples and with health groups like the American Nurses Association.

We're also engaging directly with Walmart and other corporate partners to improve screening for toxic chemicals in the products they buy from suppliers.

Reform can't come too soon. America's children shouldn't have to wait for the next revelation of tainted toys for the nation to act.

CHEMICAL SLEUTH



John Rae

Richard Denison, by highlighting flaws in EPA's chemical testing program, pushed the agency to reform its procedures.

▶ VIDEO AND BLOG: Follow the story and take action at edf.org/chemreform



SHARING THE CATCH

Fishermen are embracing a new approach to end overfishing

Can markets help solve the crisis in the oceans? With EDF's help, New England is one of several regions that recently voted for a new management method: catch shares. Now the 400-year-old New England cod fishery could finally be on the path to recovery.

By Rod Griffin

Captain Steve Arnold scans the horizon from the wheelhouse of the *Elizabeth Helen*. "I love what I do," he says as he navigates the 55-foot trawler past the jetties through the mist into Rhode Island Sound. The vessel rides over 10-foot swells heading east of Point Judith Light in search of fluke, also known as summer flounder.

"I know they're here," says Arnold, who's been fishing these waters since 1983. "They'll soon migrate offshore. This is a good place to catch them."

Once we reach our destination, Arnold logs our coordinates into the computer (transmitted electronically to fishery scientists) and deploys the vessel's trawl.

The motorized winch groans as it plays out a 45-foot-wide swath of weighted net that will lightly drag the bottom.

The *Elizabeth Helen*, named after one of Arnold's daughters, is one of eight boats participating in a pilot catch-share program that EDF helped support for fluke in Rhode Island waters. In exchange for accepting a strict limit on their catch and greater accountability, fishermen are granted flexibility to fish when they want.

Fishery managers typically tried to control fishing by shortening the season and imposing trip limits. But without incentives to conserve, fishermen are compelled to race each other to catch as

“Without EDF, I don’t think the fishing community would have learned about the science and economics of this great idea.”

—Brian Mose, trawl fisherman in British Columbia

many fish as possible.

“Catch shares allow us to manage our business more efficiently,” Arnold says. “It means I don’t need to go 70 miles offshore in February, when it’s more dangerous and costly.” Last year, the *Elizabeth Helen* burned \$90,000 of fuel. Arnold expects operating costs to be substantially lower this year. Since he’s not racing against the clock, it also means he can fish when market prices are higher. And he can be more selective, taking precautions to avoid bycatch, unwanted fish that are discarded and usually die.

An hour after Arnold set his net, he and crewmate Kevin Barber haul in 400 pounds of fluke. “It’s a great feeling to be able to fish sustainably—and profitably,” he says grinning.

Turning the tide for fisheries

The conditions that led to the pilot program for flounder off Rhode Island—overcapitalization of fleets and poor



Captain Steve Arnold: “I want the mom-and-pop fishing operations to survive.”

management policy—exist in fisheries around the nation.

Environmental Defense Fund has long advocated catch shares as the best cure for ailing fisheries. A 2008 study in *Nature* showed that fish populations with catch shares increased 400% over a 17-year period, while many other fisheries were plummeting. The program we helped develop for red snapper in the Gulf of Mexico in 2006 has cut bycatch by 70%—and was recently expanded to include grouper. We also played a pivotal role last year advancing a catch-share program for rockfish and 80 other groundfish stocks on the West Coast.

Our efforts are now paying off in New England, historically the region where fishermen have been most resistant to change. In a major breakthrough this summer, the New England fisheries council voted unanimously to implement a catch-share program for 19 stocks of groundfish, including cod and haddock.

To enlist support, EDF took fishermen to British Columbia to see how catch shares have revived troubled fishing communities there.

The initiative received a boost last spring when Dr. Jane Lubchenco, the NOAA administrator and former vice chair of EDF’s Board of Trustees, pledged more than \$16 million to help New England transition to catch shares.

New co-ops will be run by fishermen themselves

The new system, which will go into effect in May, creates community-based co-ops, or sectors, run by fishermen. The co-ops will harvest groundfish based on a scientifically determined total annual catch limit. Each sector is allocated a

MASTER AND COMMANDER



Tim Connor

Fishermen are well aware of Sally McGee’s background as a marine issues expert on Capitol Hill. But many don’t know that EDF’s New England fisheries policy director also has a U.S. Coast Guard merchant mariner’s license, which certifies her to operate a 100-ton vessel. To earn her license, McGee had to log 540 days at sea.

Her experience navigating tough waters may have helped her steer the contentious New England fishery management council to a 16-0 vote in favor of catch shares. McGee is the only representative from an environmental group to sit on the council.

percentage share determined by catch history, with fishermen themselves deciding how best to divvy up the shares. Fishermen representing 90% of the catch in New England have opted to participate in the voluntary program.

“For the first time, New England fishermen will be held truly accountable for the number of groundfish they catch,” says EDF New England fisheries policy director Sally McGee, who sits on the council. McGee is now advocating widespread monitoring to ensure compliance with the rules.

Fishermen are coming on board. ➔

43

Number of commercially important U.S. fish stocks classified as overfished



Tim Connor

Kevin Barber, a crewmate on the *Elizabeth Helen*, works the nets.

“I was anti-quota a few years ago, until I saw what was happening,” says Rodney Avila, a fourth-generation New Bedford fisherman and council member. “The management system was ineffective. We were either catching too much or discarding too much.”

In some cases, he says, the trip limit was 200 pounds and boats would catch 5,000 pounds in a tow. They would keep 200 and throw the rest away to die. “It’s a constant battle of discarding good edible fish, which is a moral crime. No fisherman wants to do that, but that’s what you have to do to avoid breaking the law.”

A more rational policy

With catch shares, fishermen have the

option to trade their shares with other boats if the need arises. For example, if a fisherman takes more than his share—or a species other than the one targeted—he can buy shares from someone else, still keeping the total catch within the limits. The result: less waste and more profit.

Unlike other fishery management tools, catch shares reward fishermen for conservation. As the fishery recovers and managers can raise the total annual catch limit, each fisherman’s percentage share is worth more. “You take an interest in conserving the fish,” explains council member Dave Preble. “It’s the only system worldwide that really works.”

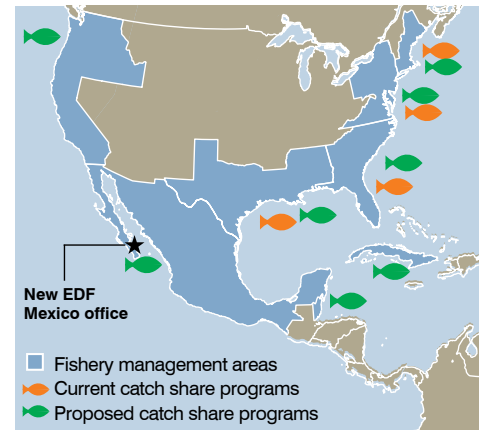
The approach is quickly winning converts, even among former skeptics.

With solid backing from fishermen, the South Atlantic council is now considering a catch-share system for snapper and grouper. And golden crab fishermen have asked for our help in developing a catch-share program for them.

We’re also exploring similar programs with recreational fishermen. In some cases they account for fully half the catch.

Fishermen may be slow to change, but they are quick to adapt. “This is the future,” says Arnold. “Over time, I’m confident the stocks will rebuild. If you take care of the ocean, it will take care of you.”

CATCH SHARES ARE CATCHING ON



All around North America, EDF is working to revive troubled fisheries by giving fishermen a financial stake in the catch.

VIDEO: Fishermen on saving the seas at edf.org/catchsharesaction

TALE OF A FISHERY

New England waters were once so thick with cod that colonial fishermen bragged they could lower a basket and pull it up full of fish. Generations of heavy fishing and ill-conceived management proved devastating, both for the fish and coastal communities. Now, cod may be getting a second act.

1532

England and Germany fight a war over Icelandic codfish.



1880

With a carving of the “Sacred Cod” hanging in the Massachusetts State House, Gloucester is the world’s second largest fishing port.



1976

Congress passes the Magnuson Act, extending U.S. waters to 200 miles; within three years the New England groundfish fleet doubles in size.



EXPORTING A GOOD IDEA

EDF's new Mexico office brings catch shares to Gulf of California fisheries

Wedged between Baja California and mainland Mexico, the 932-mile-long Gulf of California supports a Noah's ark of marine life. Hundreds of islets provide nesting grounds for sea birds while the gulf's shallow lagoons and deep trenches nurture sea lions, dolphins and whales. The endangered vaquita porpoise, the world's smallest cetacean, is found nowhere else.

The Gulf also provides more than half of Mexico's seafood. But too many fishermen chase too few fish, and illegal fishing is a major problem. Destructive fishing practices kill hundreds of sea turtles and vaquitas every year.

"The resource is being overexploited," says a shrimp boat captain from El Coloradito. Fishermen are moving on to smaller catch, now that large finfish, like swordfish, have been seriously overfished. This threatens the Gulf's intricate web of life.

In response, EDF has set out to transform Gulf of California fisheries from our new office in La Paz, Mexico.

"Both the Mexican government and fishermen want to end destructive fishing practices," says Scott Edwards, director of the new office.



Mark A. Johnson/Corbis

Beyond Baja's beaches, one of the world's richest marine ecosystems is under threat.

With a grant from the Walton Family Foundation, EDF and World Wildlife Fund formed a partnership with Mexican officials and fishermen to begin a catch-share program, focusing first on the shrimp fishery in Sinaloa. Our analysis shows that a well-designed program in the Gulf will significantly boost fish populations and profits.

Improving food security

EDF is also bringing this model to help lobster and conch fisheries on the

Mesoamerican reef, the largest barrier reef in the Western hemisphere. In Belize we are forging local alliances to lay the groundwork for incentives-based management.

Tackling the overfishing problem beyond U.S. waters is critical, as fish from international waters constitute 80% of the seafood eaten by Americans. EDF's new programs will not only ensure sustainable seafood for U.S. consumers, they'll also increase food security and alleviate poverty abroad.

1982

With high-tech trawlers mining Georges Bank, commercial cod landings hit an all-time high.



1994

Cod populations on Georges Bank plummet to 40% of what they were in 1990; fishery managers institute trip limits. Stocks continue to decline.



2004

EDF helps develop the first catch-share program for the cod hook-and-line fleet.



2010

New England is slated to begin a catch-share program for 19 stocks of New England groundfish, including cod.



FARMERS TO THE RESCUE

Amid threats to water quality, surprising partnerships emerge



W. Cody/Corbis

Lakes, streams and bays across America are threatened by runoff of farm chemicals and other pollution. Now farmers are EDF's partners in novel efforts to restore water quality in three iconic ecosystems.

Help for the Chesapeake Bay

The Chesapeake Bay is our nation's largest estuary. It offers habitat for some 300 species of fish and birds and generates an estimated \$1 trillion in economic value.

But this rich ecosystem is now so polluted that it won't meet federal water quality standards next year. Fertilizer running off farmland and other pollutants have created huge dead zones in the Bay, breaking down its food web. The Bay's famous oyster population is now at just 2% of its historical abundance.

Conservation efforts in the six states surrounding the Bay have not been sufficient to restore the Bay. EDF responded in 2004 by bringing together farmers, technical experts and farm advisors to find a solution.

"Without farmers as partners we couldn't get anywhere," says Suzy Friedman, EDF's Chesapeake Bay regional director. What we're offering them is more

accurate information about how much fertilizer their crops need, so they can reduce polluted runoff—and save money.

So far, about 130 farmers on 30,000 acres have enrolled in our program. They use 20% less fertilizer on average, saving each of them thousands of dollars a year. We plan to soon have 500 farmers participating, managing 100,000 acres. Says Friedman: "Our goal is to help farmers heal the Bay in ways that work for their bottom line. We can bring back the fisheries and help agriculture."

Our next step is to take advanced nutrient management nationwide by incorporating it into official U.S. Department of Agriculture standards.

The Heartland: Cleaning up Lake Erie

In 2007, one of the worst floods in a century deluged northwest Ohio, inundating farms along the rivers that empty into Lake Erie. "Farms that had planted buffers of grass

suffered less damage," recalls EDF regional director Karen Chapman, who surveyed the flood by helicopter. "Those who farmed right to the edges of streams were hit much harder."

Intensive cultivation has caused multiple problems in the region. For example, the Maumee River basin's marshes and forests, historically called the Great Black Swamp, once soaked up storm waters and cycled nutrients. But the swamp was drained more than a century ago and converted to farmland. The result? Today, about five millions tons of soil erodes into the lake every year, and millions are spent annually to dredge it out of the Port of Toledo. Polluted runoff produces floating mats of slimy green algae, threatening an \$8 billion tourism and fishing industry.

EDF is providing area farmers with economic analysis that shows them which cropland may be more profitable to return to natural vegetation. "We can't turn back the clock to pristine nature," says Chapman, "but working with farmers, we can dramatically improve water quality." The improvements will also help the region withstand the gathering impacts of global warming.

100,000
Number of acres around
Chesapeake Bay targeted
by EDF for restoration

The program has grown fast: Farmers managing some 37,000 critical acres are now maintaining buffers and restoring wetlands, with support from federal programs. Todd Hesterman, a fourth-generation farmer in Napoleon, OH, is one of them.

"EDF understands that farmers need to produce food but also want to help the environment," says Hesterman.

California farmers find ways to use less pesticide

The San Joaquin is California's second longest river and its most endangered according to the group American Rivers. To rescue the river, EDF is using its signature approach: finding unusual partners and common ground.

Farmers in the Northern San Joaquin Valley have had difficulty paying for the cleanup of irrigation water polluted by pesticides, fertilizers and toxic metals. That gave our scientists Eric Holst and Stacy Small an idea: Why not partner with farm groups in the Valley to clean up critical waterways?

Together, we helped direct \$12.5 mil-

lion in federal funding to farmers who help stop runoff before it reaches the river. Work has begun to create temporary ponds to trap runoff, plant buffer strips along stream banks and grow hedgerows to help the predators of crop pests.

For example, one pest species in Valley vineyards, the grape leafhopper, is preyed upon by a small parasitic wasp. To thrive, the wasps need nectar made by flowering plants in the hedgerows. More hedgerows mean more wasps and fewer leafhoppers—and that means less pesticide.

One big winner will be the San Joaquin River National Wildlife Refuge, a stopover on the Pacific Flyway for migratory birds, including the Swainson's Hawk and the



Anthony Redpath/Corbis

Keeping pesticides out of your chardonnay.

Yellow Warbler. Another winner will be San Francisco Bay, a highly threatened ecosystem fed by water from the river.

HOW TO REVIVE AMERICA'S RIVERS AND AGRICULTURE

America's wetlands and riverside forests endow us with priceless benefits—absorbing storm water, stopping erosion, filtering pollution and providing food and habitat for wildlife.

But since World War II, development and intensive agriculture

have taken a heavy toll on these fragile ecosystems. Nationwide, 70% of the riverbank habitat vital to wildlife and flood control is gone. Now, innovative projects are rewarding farmers for conserving the nation's most threatened watersheds.

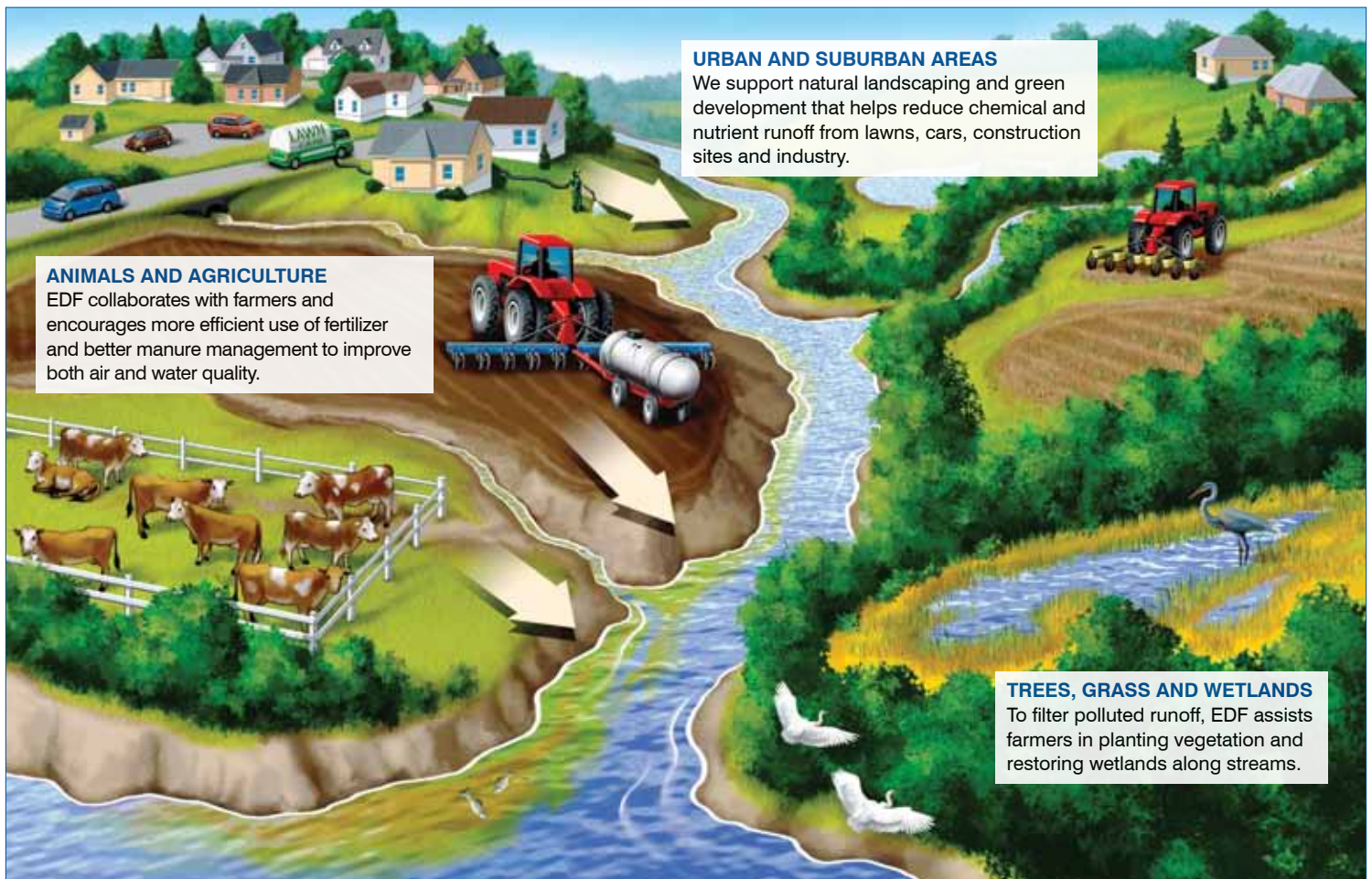


Illustration by John E. Kaufmann

GREEN LIVING



EAT WHAT'S GOOD FOR YOU —AND THE PLANET

Hummer/Getty Images

By Jim Motavalli

In his best-selling book, *Omnivore's Dilemma*, Michael Pollan writes: "Eat food. Not too much. Mostly plants." That's good advice for the planet, as well as for people. A diet of predominantly fatty red meat, dairy and processed foods is far less healthy—and far more destructive environmentally—than one that emphasizes whole grains, fruits and vegetables.

Fortunately, improving one's diet has never been easier. As *The New York Times* reported, "Natural food supermarkets have been springing up around the country like dandelions on a suburban lawn." Mainstream markets, too, are increasingly carrying natural foods. Last year, U.S. organic food and beverage sales hit a whopping \$21.1 billion.

Here are some tips for healthy, eco-friendly eating:

Eat smart

Cut down your intake of red meat, especially processed meats. Seek out whole-grain, high-fiber foods, and avoid

those that are high in saturated fats, cholesterol, salt and added sugar.

A balanced diet

By eating a wide variety of fresh, non-processed foods, you can get all the vitamins and minerals you need. Oats, barley and fresh fruits, for example, are excellent sources of the soluble fiber that aids in weight loss and cholesterol control. Other necessary nutrients are folate (found in green vegetables, orange juice and fortified grains); potassium (plentiful in fruits, vegetables and beans); omega-3 fatty acids (fish, certain vegetable oils, soy products and walnuts); and antioxidants (fruits and vegetables).

Try fish

As a main course, try fish, poultry or lean meats. The American Heart Association recommends eating fish twice a week. But be careful. Which fish you choose matters. Some seafood—such as Chilean seabass (the marketing name for Patagonian toothfish)—is overfished and others (like canned tuna

with high mercury levels) present health risks. EDF's Seafood and Sushi Selectors can help inform your choice.

Sustainable meat

If you're buying beef, try switching to the grass-fed alternative. Cows are naturally better able to digest grass than the corn they are routinely fed in large feedlots. Grass-fed beef is lower in overall fat and saturated fat (the harmful ones) but has added levels of omega-3 fats (the good ones). All certified organic beef and pork is antibiotic-free.

Buy local

Locally grown products have surged in popularity because people are concerned about the high environmental cost of transporting food (the average piece of produce travels more than 1,500 miles). Farmers markets, once a rarity, are now sprouting everywhere—more than doubling in the last ten years. In addition, many people now buy directly from farmers who are part of the fast-growing Community Supported Agriculture (CSA) movement. CSA farms allocate percentages of their annual yield to local clients who pay upfront fees and each week receive their portion of what's ripe.

Eating out

American families make an average of 233 "restaurant stops" annually, says the National Restaurant Association. But eating out can be a minefield, not only because big portions (especially at fast-food chains) are often laden with calories and extra sodium, but also because other environmental issues



istockphoto

There's truth to the old adage,
"You are what you eat."

remain unaddressed. Last June EDF teamed up with Restaurant Associates—which provides fine and casual dining at more than 100 locations, including leading museums, performing arts venues and both houses of Congress—to define “best practices” for green dining. By the fall of 2011, all client facilities will be in compliance with “certified Green Restaurant” standards developed by the Green Restaurant Association. In addition, they’ve committed to reducing their carbon footprints 20% by next summer.

It’s never been more important to make smart food choices. Fortunately, the path to an improved diet is clearly marked. And guess what? Wholesome food usually tastes better, too.

Green Living columnist Jim Motavalli writes for E/The Environmental Magazine (for subscription information: 800-967-6572 or emagazine.com). Opinions are the author’s and not those of Environmental Defense Fund staff.

RESOURCE CENTER

On the menu

Find a sustainable place to dine near home or on the road: The Green Restaurant Association; dinegreen.com/customers

Try out healthy chicken and fish recipes from *Delicious Living* magazine: deliciouslivingmag.com/food/recipes

Locate farmers markets, CSAs and sustainably raised meat in your area: eatwellguide.org

Access a zipcode-searchable database of more than 12,000 CSAs nationwide: Local Harvest; localharvest.org/csa



Learn what fish are sustainable and safe; get recipes: EDF’s Seafood and Sushi Selectors; edf.org/seafood

John Robbins’ essay on grass-fed beef is at foodrevolution.org/grassfedbeef.htm

LEGACY OF A LIFETIME



Along with defending the environment, Betsy Laties and her husband opened their home to abandoned dogs.

Ask Betsy Laties, a scientist and activist, where she got her commitment to nature. “My mother,” she’ll say. That was Elsie Morrell Henderson, a suffragette who once chained herself to a railing on Wall Street to demand the vote.

As a nine-year-old, Betsy would hike the Sierra Nevadas with her mother, who told her: “You must always remember you are preserving the mountains for us all.” She would later walk those same trails with her husband, George Laties. They met as students at U.C. Berkeley, where Betsy endowed two scholarships for women.

From 1974 to 1987, Betsy served on the Los Angeles Environmental Quality Commission, and has participated in many conservation battles. She fought one plan to use the Santa Monica

canyons as landfills, and another to run a freeway through them. Today, a trail there bears her name.

Betsy chose to support EDF in her will because “They do what few organizations do—defend threatened areas.” She adds: “We have to remember we have only one beautiful planet. We must take care of it.”

A gift to the future

If you would like to leave an environmental legacy by including EDF in your will or estate plans, please contact Nick Pitaro toll-free at 1-877-OSPREYS (1-877-677-7397), by email at ospreys@edf.org or visit us at edf.org/plannedgiving

For sample language for your will, log on to edf.org/bequestlanguage

Saving a shrinking coastline

Before levees were built to control floods, the Mississippi River would spill over its banks every spring, delivering rich silt to replenish Louisiana's coastline. Now the silt flows out into the Gulf of Mexico, bypassing the Delta's wetlands and cypress forests.

As a result, Louisiana has lost a third of its coastal marshes, which provide crucial habitat for millions of birds and fish, and buffer the coast from hurricanes and floods.

As the ravages of Katrina made clear, this damaged ecosystem is in urgent need of strengthening. There is no time to lose.

In advance of President Obama's trip to New Orleans in October, EDF assembled a broad alliance of elected officials, environmental groups and business leaders to send a letter to the president urging "a robust and effective federal effort" to ensure "coastal Louisiana's

survival." In a single day, EDF's Action Network generated more than 11,000 emails in support of wetlands restoration.

On the ground, EDF is helping design the biggest ever project to divert silt back to the Delta and heal the wetlands around Myrtle Grove. This will serve as a template for restoring the entire Delta region.



The migration patterns of songbirds like this Scarlet Tanager are disrupted by loss of wetland habitat.

Smart grid:

A two-way street for electricity

Imagine if America's aging electric grid were interactive, like the Internet. When the sun shines, you could generate solar power and sell it to your neighbor. An intelligent grid could help smooth out peaks of demand and supply, or even route excess power to the batteries of plug-in hybrid cars.

That's the vision of the Pecan Street Project, a smart-grid initiative developed by the City of Austin in collaboration with EDF, Austin Energy and the University of Texas to reinvent the way electricity is generated and used. More than a dozen companies, including Dell, GE and IBM, have partnered with us on the initiative.

The project will use sensors to relay data about generation, consumption and transmission line status, letting operators match supply to demand in real time and avert problems before they occur. The project puts Austin at the forefront of an anticipated global movement to supply power in ways that enable and reward conservation, while integrating multiple, clean energy sources.

Later this year, we'll issue a report on smart-grid innovations that have surfaced, from cooperative solar farms to electricity pricing that lowers rates in off-peak hours.

Stay tuned.



In California, an incentive to drive less

Mark Aquino drives just 1.6 miles to work in Los Angeles, but his insurance costs \$140 a month. Doesn't make sense to us either. Now, a new option for Californians called "Pay As You Drive" (PAYD) will link premiums to mileage, serving as an incentive to reduce driving, congestion and pollution. EDF sponsored and developed the bill that allows the new choice.

With widespread adoption of PAYD,

nearly two-thirds of California's households would save on premiums—an average of \$276 per car annually, according to The Brookings Institution—and driving of passenger vehicles could drop 8%. Insurance firms like the idea too: It allows them to price premiums more accurately.

"Success in California can inspire these programs in other states," notes EDF's Lauren Navarro.



Sunflowers: An Electric Garden, a public art installation in Austin, TX, by the Harries/Héder collaborative, is an array of solar collectors.

Shipping news: Cleaner air for U.S. ports

Large oceangoing vessels are a major source of air pollution in 40 cities that fail to meet federal air quality standards. Mostly sailing under foreign flags, these container ships, tankers and cruise ships have been beyond EPA's reach. But they could soon be a lot cleaner, thanks to EDF and our allies.

Working with EPA, we won preliminary approval for an "emission control area" extending 230 miles off the U.S. coast. This designation will cut ship pollution 90% by 2015.

We're also helping cut other sources of pollution in port cities. In Houston, for example, we helped launch a \$9 million Clean Truck program to retrofit trucks, which account for one-third of that port's emissions. One project partner, Walmart, will give preferential treatment in contracts to truckers who drive the cleaner rigs.

"Cleaning up pollution hotspots around America's ports is one of the most cost-effective things we can do to protect public health," says our air specialist Dr. Elena Craft.



Greening the Big Apple

The Empire State Building is a cultural icon, but few would call it a model green building. New efficiency upgrades such as 6,500 triple-glazed windows and retrofitted furnaces could change that. The renovations could cut energy consumption 38% and pay for themselves within three years.

The project is part of a broader initiative by Mayor Michael Bloomberg, in consultation with EDF and others, to make New York the country's greenest city.

The goal is to retrofit 2.5 billion square feet of real estate. Our focus is on existing large commercial and residential buildings, which account for about 80% of the city's carbon footprint, about twice the national average.

"Improving energy efficiency is the single most important step that New York and other cities can take to tackle global warming," says our regional director Andy Darrell.

We are working closely with New York City agencies to develop the plan and get it approved by the City Council. By removing market barriers that restrict investments in energy efficiency, our plan could slash pollution and save \$750 million in energy costs annually.

EDF's pioneering policy solutions in New York's real-estate market could be replicated nationwide.



Oceangoing ships, which burn the dirtiest kind of fuel, will soon be a lot cleaner thanks to EDF.

World Bank still favors coal

The World Bank and other public international financial institutions spend nearly three times as much on old-fashioned coal plants as on renewable energy. Our recent analysis, *Foreclosing the Future*, found that these institutions have put up \$37 billion in public money to fund 88 new or expanded coal plants in the past 15 years. Together, these plants will spew almost as much carbon dioxide as all the coal plants in the European Union.

Our report recommends specific guidelines the institutions should adopt to stop undermining the world effort against global warming. A recent Worldwatch Institute analysis credits EDF for spurring the World Bank to begin discussing changes to its misguided policy.

Better management for recreational fishing

In the Gulf of Mexico, recreational fishing accounts for more than half the catch of struggling species like red snapper. Yet while commercial fisheries are switching to new regulations to help species recover, millions of recreational fishermen are still regulated by the failed old policies that often led to chronic overfishing. One result: The 2009 red snapper season for recreational anglers shrank to just a few months.

Sport fishing can only become sustainable with reliable data. This summer, EDF helped organize Save Our Sector, a coalition of charter captains, whose boats we equipped with electronic logbooks and monitoring systems. This is the first ever real-time data collection program for sport fishing.

BRIDGING THE U.S-CHINA DIVIDE ON CLIMATE



sinopictures/Peter Arnold Inc.

EDF is playing a critical role in helping China and the United States cooperate on global warming.

As world leaders stumble toward a climate agreement, success requires a real commitment from both the United States and China, which together account for 40% of global warming pollution.

More than a decade ago, Beijing called on EDF chief economist Dr. Daniel Dudek to help create a national market to cut sulfur dioxide pollution. Now we're helping China tackle greenhouse gases in the same way.

For years, China and the United States have engaged in a "you first" game, wasting precious time. There is no more time to waste.

In September, we brought together Chinese solar and wind power

executives, investors, academics and others to meet with their counterparts in the United States. The goal was to help Chinese businesses form an organization similar to the U.S. Climate Action Partnership (USCAP), the environmental-business alliance EDF helped create that proved key in passing climate legislation in the House.

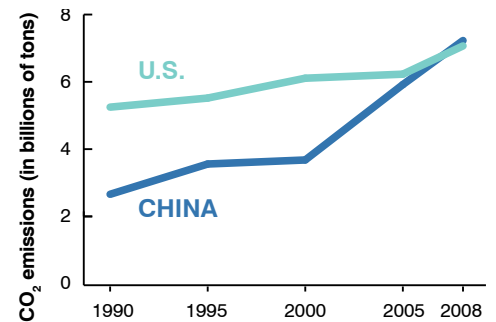
China President Hu Jintao has vowed to develop more alternative energy but he has declined to commit to a cap on greenhouse gases.

"Chinese business could lead China in demonstrating the benefits of a cap on carbon, just as USCAP has done in the U.S.," says EDF executive director David Yarnold.

Working with us, the China Beijing Equity Exchange last year established an environmental commodities exchange and a registry to track emissions reductions. The first market-based transaction was completed in August. Tianping Auto Insurance purchased emission credits generated by Green Commuting, a program EDF developed for the Beijing Olympics. The trade makes Tianping the country's first carbon neutral company.

Now EDF is helping develop a national carbon market standard for

CARBON KINGS



China, which will set the stage for the transition to a global market.

In rural Xinjiang, Sichuan and Shaanxi provinces, we've initiated projects that will benefit poor farmers who switch to biodigesters to avoid methane discharges and convert the desert into carbon-absorbing tracts of vegetation. The projects are funded by international companies seeking to offset their global emissions.

"These actions should sweep away the canard that China is not willing to reduce emissions," says Dudek. China is already the world's largest producer of solar panels and is expected to surpass the United States in wind turbines this year. "With China engaged," Dudek adds, "we can beat global warming."



Paul Springett/Peter Arnold

Limits to growth: Can bustling China contain its growing greenhouse gas emissions?