



Everyday Heroes

Standing strong for conservation, these EDF partners rarely make headlines, but their environmental leadership is vital.

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Being there for bees

Bees are in trouble in the United States, in part due to habitat loss. Bumblebees, which pollinate crops such as blueberries and cranberries, have been especially hard hit. In March, the rusty patched bumblebee became the first native bee listed as endangered. EDF's multistate campaign to restore nectar and milkweed habitat for monarch butterflies will help bees, including the rusty patched bumblebee.

A time for heroes



IN MAY, EDF HELPED DELIVER THE environmental community's first win against the Trump administration's reckless campaign to weaken environmental protections. Thanks in part to our members who made their concerns known to their senators—and to the tireless work of EDF Action, our political advocacy partner—the Senate upheld safeguards controlling the oil and gas industry's harmful emissions of methane, a powerful greenhouse gas. The administration responded almost immediately with plans to suspend the safeguards. We will fight this move in the courts (*see p. 7*).

I'm heartened by the everyday heroes who stand with us in the fight to protect America's bedrock environmental protections (*see cover story, p. 8*). The New Mexico rancher on our cover, Don Schreiber, is one of many determined voices working to preserve the methane standards.

The senators who voted to preserve the methane rule are heroes in my book, too, as are EDF's members. You have been quick to contact your elected officials and generous in your financial support at this challenging time. Members can do so much, including attending town halls during summer recess, to pressure elected officials to do the right thing on the environment (*see "Be heard" on p. 19*).

In June, President Trump began the process of pulling out of the Paris climate agreement, galvanizing the rest of the world—and most of America—to reassert support of the accord. Only Nicaragua and Syria now stand with the U.S. government outside the Paris Agreement. The president acted against the advice of scientists, 30 states, many members of his own administration, and hundreds of companies ranging from General Electric to Shell.

Fortunately, there is no shortage of partners who can propel us forward on climate. EDF is working with countries like China, companies like Walmart and states—all of them ready to step into the leadership vacuum created by the U.S. withdrawal. In June, California adopted a rule to close methane leaks on pipelines—just the sort of action that should be undertaken at the federal level.

Not only climate is in the crosshairs. Members of Congress have introduced dozens of bills since January to weaken the Endangered Species Act (*see p. 13*). And the president's proposed budget for EPA—which would cut the agency by nearly one-third—would put air and water quality and enforcement at risk.

This spring, hundreds of thousands of Americans joined in marches around the country in support of climate action and sound science. Their voices were key to persuading the Senate to uphold the methane standard. If we are to persuade Congress to defeat the assaults on public health and the environment, it's critical that people continue to stand up and make their voices heard.

Fred Krupp
EDF President



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

Our work is made possible by the support of more than two million members.



On the cover:
As leadership falters in Washington and funding dries up, local guardians have emerged to protect the planet. Some don't even call themselves environmentalists. Their numbers are growing, and their grit and ingenuity are inspiring.

In this issue, we celebrate them.

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Solutions




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FIELD NOTES



GETTY

China readies the world's largest carbon emissions trading system.

EDF coaches China's carbon traders

While President Trump slashes America's commitments on climate change, China, the world's largest carbon emitter, is stepping up. This year China plans to launch its nationwide carbon trading system. When fully implemented, the program will be the world's largest emissions trading system, covering up to five billion metric tons of carbon emissions from some 8,000 companies. These will be the first national limits on carbon pollution.

EDF has been in the thick of the preparations, training 3,600 government and industry officials who will be charged with running the trading system.

Success will depend on people like Li Yongliang, Li,

director of industry development at China's Petroleum and Chemical Industry Federation, was one of the officials EDF trained. The two industries contribute more than 10% of China's greenhouse gas emissions.

"Climate change is altering the delicate balance of the planet," Li says. "We're seeing loss of quality of life here."

Carbon trading will provide a market-based pathway for pollution cuts. The system is key to meeting China's commitments under the Paris climate agreement.

"EDF has played an important role in building the carbon trading capacity of major participants in China's carbon market," Li says.



Congress is moving forward with radical legislation that would undercut safety protections for everything from pacifiers to drinking water. EDF ran this ad in *Politico* to warn of the direct threats to public health.

>>> TAKE ACTION >>> edf.org/StopHealthThreats

In China and India, the eclipse of coal?

China and India are popular scapegoats for opponents of climate action. Why should the U.S. reduce carbon emissions, they say, while China and India rush to build more coal plants? The argument is badly outdated. China recently cancelled plans for more than 100 new coal-fired power plants, and India is planning to halt construction of all new coal plants by 2022. In the Paris Agreement, India pledged to meet 40% of its electricity needs with clean



REUTERS

power by 2030. The new plan would put India way ahead of schedule, delivering 53% renewable power by 2027.

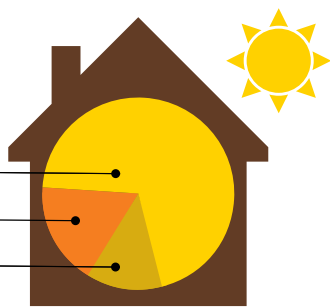
Solar power: A viable, affordable energy option

A survey of solar-powered households in the four top solar states found that 70% of them earned \$45,000-150,000 annually.

70% middle income

17% upper income

13% lower income



SOURCE: GTM RESEARCH SURVEY, ENERGYWIRE.



ISTOCK

PROGRESS ON EDF MONARCH CAMPAIGN

EDF is making good progress in its effort to save the monarch butterfly. Watch this video on EDF's work with pioneering farmers who are helping us restore habitat along the migration superhighways. Go to edf.org/MonarchVideo.



AGERTY

Less water on rice fields means less climate-warming methane.

Growing rice sustainably

Rice farmer Mark Isbell is the fourth generation to cultivate his family's 3,000 acres of clay soil on the Arkansas Grand Prairie. He also inherited the family legacy of trying new approaches to farming.

His father was the first U.S. farmer to produce a particular variety of Japanese rice. So when Isbell and his family heard of a way to reduce their farm's greenhouse gas emissions and earn some money on the side, they jumped at the chance.

In a groundbreaking project, this year he and other Arkansas rice farmers will

generate the first-ever carbon credits for U.S. rice growers under California's cap-and-trade program. Starting this year, companies can buy the credits to offset their greenhouse gas emissions. EDF spearheaded the project, and we're now launching similar emissions reduction projects for almond and corn growers.

"For my great-grandad, sustainability was just making it to the next year," says Isbell. "Things have changed. We need to use today's technology to become more efficient at farming and doing good for the world."

Where the U.S. energy jobs are

SOLAR AND WIND

476,000



COAL

160,000

(57,000 of which are coal mining jobs)



SOURCE: U.S. D.O.E. ENERGY AND EMPLOYMENT REPORT, 2017

Climate deniers target teachers

In March, tens of thousands of science teachers around the country began receiving strange, unsolicited packages in the mail. The packages were stuffed with climate-denying propaganda, including a book, *Why Scientists Disagree About Global Warming*. (In reality, they don't.)

The campaign is the work of the Heartland Institute, a Chicago-based libertarian "think tank." The group, which receives funding from the Koch brothers, is infamous for wildly inappropriate campaigns. One featured a billboard that compared people worried about climate change to domestic terrorist Ted Kaczynski, the Unabomber. Heartland says its goal is to reach virtually every K-12 science teacher in the country. Although the flagrantly misleading materials will land directly in the recycling bin in most classrooms, some teachers will take the message seriously, to the great detriment of their young students.

In Louisiana, good news for wetlands and communities

Louisiana passed an EDF-backed plan to restore coastal wetlands and protect communities. Here's how the funds in the 50-year plan will be allocated:

- \$18bn for marsh creation
- \$2bn other restoration
- \$6bn risk reduction
- \$5bn for sediment diversions
- \$19bn structural protection

NOAA

Trump's plan to eviscerate EPA

As a candidate, Donald Trump vowed to get rid of EPA, leaving only “little tidbits” intact. As president, he has used every lever at his disposal to make that a reality. Among other things, he has taken steps to revoke the Clean Power Plan and delay implementation of mercury and air toxics standards. And now there's the 2018 budget. By proposing to slash EPA funding 31%, President Trump clearly intends to hobble the agency.



Proposed cuts to EPA's budget

Likely results



Climate research

Because of the sweeping cuts to scientific programs, EPA's Science Advisory Board budget would be slashed 84%. The agency has already removed some scientific data from its websites.

People will be more vulnerable to, and less prepared for, extreme weather events. Lack of data will hinder other agencies' abilities to monitor GHG emissions and forecast floods and hurricanes.



State air quality programs

Important funding for local air monitoring comes from EPA. It allows health officials to warn of “Code Red” days when the air is dangerous for children with asthma. The budget would cut funding by one-third.

The 125 million Americans who live in communities with unhealthy levels of air pollution will suffer even more. Local governments will be legally required to address air quality but may lack funding to do so.



Criminal and civil enforcement

Trump wants to cut EPA's enforcement office by 40%, arguing that states should oversee enforcement of rules. But his budget would also cut the grants that allow states to conduct that enforcement by 45%.

Sunoco Pipeline agreed to pay \$1 million for a 2012 spill that sent gasoline into two waterways near Wellington, OH, forcing the evacuation of 70 people. Other penalties like this won't be assessed or collected.



Superfund cleanup

There are more than 1,300 toxic Superfund waste sites and 450,000 brownfield hazardous sites across America. The president's budget would cut the Superfund cleanup program by \$194 million.

Communities like Amesbury, MA, that count on federal funding to keep citizens safe from groundwater contamination would be damaged. They'd also lack funds for redevelopment and restoration.



Regional water quality

Trump's budget would eliminate more than \$400 million for programs to clean up America's greatest yet imperiled bodies of water—like the Chesapeake Bay, the Great Lakes and Puget Sound.

Critical estuaries and the fisheries that depend on them—like Chesapeake Bay crabs and oysters—will be harmed.



Protections for tributaries and wetlands

Trump has ordered review and “elimination” of the rule that protects tributaries and wetlands under the Clean Water Act.

Defunding this rule could lead to pollution of the Prairie Pothole Region in the Upper Midwest, which Ducks Unlimited calls “the most important and threatened waterfowl habitat in North America.”



OFFSET

Special places like Utah's Grand Staircase-Escalante face threats from the Trump administration, including air pollution from drilling.

Our first big win against Trump's agenda

IN A VICTORY FOR THE ENVIRONMENT and public health, the U.S. Senate voted in May to uphold an Obama-era climate regulation to control the release of methane from oil and gas wells on public land. The triumph marked EDF's—and the nation's—first big environmental win of the Trump administration.

"It sends a powerful signal that those who intend to gut our environmental laws will not have free rein," says EDF president Fred Krupp.

The rule affects 245 million acres of federal and tribal lands overseen by the Bureau of Land Management (BLM). Large tracts of these lands are leased for oil and gas drilling. This activity is responsible for about 12% of the nation's emissions of methane, a potent greenhouse gas.

Under the Trump administration, Congress wasted no time attempting to roll back Obama-era protections, including the BLM methane rule. Since January, Congress had used its authority under the Congressional Review Act to strike down 14 safeguards introduced during the final months of Obama's term.

The demise of the methane rule, which requires oil and gas companies to repair leaks and capture gas that is traditionally vented or burned off at drilling sites, seemed a foregone conclusion.

But EDF fought back. With our allies, we mounted an aggressive campaign targeting key senators. The Senate blocked

the repeal by a razor-thin margin, beating back a drive to ignore basic science and commonsense economics.

In the United States, oil and gas operations are the largest source of methane pollution. Methane, the main component of natural gas, accounts for a quarter of the warming we experience today.

Oil and gas facilities also spew smog-forming and toxic air pollutants like benzene. Nationally, 12.4 million people live within one-half mile of oil and gas facilities. The methane rule will prevent roughly 180,000 tons of emissions a year, the equivalent over 20 years of taking more than 900,000 cars off the road.

To defend the standards, EDF Action helped develop strong champions like Tom Udall (D-NM) and reached out to swing senators on both sides of the aisle. "There was a long pause in the chamber after Senator McCain cast the deciding vote," says Jon Goldstein, our director of regulatory and legislative affairs.

EDF members urged senators to stand strong against the oil and gas lobby through an outpouring of phone calls and emails. To marshal investor support, EDF+Business worked closely with corporate leaders, as well as with partners Interfaith Center on Corporate Responsibility and Ceres, advocates of corporate responsibility. As a result, investors representing some \$500 billion in assets met with key senators and wrote opinion articles in local newspapers.

Our campaign was built on the coalition EDF forged of environmental groups, tribal interests, taxpayer advocates, veterans and local leaders like Don Schreiber (*see pp. 8–9*).

Despite the victory, the BLM rule is still in the crosshairs of the Trump administration. In June, BLM announced it would suspend key parts of the rule, but the rule itself cannot be undone with the stroke of a pen. EDF will defend the rule during the review process and in court. We'll continue to push for state methane rules, similar to the ones we helped win in Colorado, Ohio and Wyoming.

The safeguards have broad public support: 73% of Americans favor laws that stop gas leaks. "No one who voted in November wanted public lands plundered or our health put at risk," says Krupp.

Leslie Valentine



SHUTTERSTOCK

EDF's partnerships with energy companies laid the groundwork for action on methane.

Local heroes

Courageous deeds are often associated with battlefields or burning buildings. But you can find them in other places too—on a desolate Western mesa, in a Texas industrial community or in a statehouse. At a time when America's natural heritage is under sustained assault, EDF celebrates our partners who are showing that one person can indeed make a difference.

IN MAY, AS THE U.S. SENATE WAS PREPARING TO VOTE TO overturn an Obama administration environmental rule limiting methane emissions from oil and gas drilling on public lands, a solitary rancher in a cowboy hat could be seen making the rounds on Capitol Hill. The rancher, Don Schreiber, was there to make an impassioned plea to keep the protections intact. His chances of success seemed small.

When Don and Jane Schreiber first acquired their land in the Four Corners region of New Mexico nearly two decades ago, there wasn't much there, just a few broken-down fences and a rare spring. Yet the land's desolate beauty was irresistible: breathtaking views of the snow-covered peaks of the San Juan Mountains and gnarled piñon juniper trees clinging to bone-dry mesas and canyons. Their land comprised 480 acres and a 2,700-acre federal grazing lease, without the mineral rights beneath.

The couple threw themselves into restoring their land. To stop erosion, they planted prairie grasses, which had disappeared due to overgrazing. The couple celebrated the smallest successes—new blades of grass or animal tracks. “My wife and I set our dreams on this way of life,” says Schreiber.

Then one day, a bulldozer rolled off a truck and began tearing up the grasses they had so carefully tended. “Seeing land destroyed in one day for drilling after we had put so much into protecting it for our kids and grandchildren—that really woke us up,” says Schreiber. Their land, not far from where they had grown up, lies in the San Juan Basin, which holds the world's second-largest reserves of natural gas. Some 30,000 oil and gas wells have been drilled there. “This land is brittle like an eggshell,” Schreiber says. “If it breaks, you can't put it together again.”

That realization led the couple to dedicate themselves to defending their land against destructive drilling practices. The challenge was daunting: Oil and gas lobby groups are well organized, fierce and oppose many restrictions on gas development. “We



“I feel amazing gratitude to EDF,” says Schreiber. “They are the best anybody could work with.”



New Mexico rancher Don Schreiber took on Washington to protect canyonlands and won.

knew Grandma and Grandpa in an old pickup truck couldn't defeat the Mining Act," says Schreiber. But they could do research and urge government officials to take action.

With a clear mission, Schreiber headed to Santa Fe in 2007. There he met Jon Goldstein, now director of EDF's regulatory and legislative affairs, who was then cabinet secretary for New Mexico's natural resources department. With Goldstein's help, Schreiber got the green light to launch a 5,760-acre pilot project with energy companies and other stakeholders to develop a less destructive approach to natural gas extraction. "We found ways to save water, soil and vegetation," he says. Key parts of the model were adopted basin-wide.

Despite such progress, he and Jane are reminded daily of living with gas wells. Nearby drilling sites release natural gas, which is mostly methane, a highly potent greenhouse gas. "During venting events you can hear the sound, like the roaring of a jet engine, and the smell of raw gasoline, like paint thinner, permeates the air," he says.

In a place where everyone's connected to the oil and gas industry, Schreiber's advocacy has cost him longtime friends, but there is no chance he'll give up the fight.

His concern about methane pollution led him to EDF, and he quickly became a key on-the-ground voice in our campaign to save the BLM methane rule (*see p. 7*), starting in a TV ad and briefing Hill staffers as well as the media.

Last May, Schreiber was hailed as a hero at our victory celebration. The Senate had just voted 51-49 to keep the methane rule intact. "I was walking on air," he says. "But there's a lot more work to be done."

Leslie Valentine



MATTHEW COUGHLIN

An Alabama couple on a mission to make charter fishing sustainable

IN THE GULF OF MEXICO AND OTHER U.S. COASTAL waters, programs advanced by EDF to make commercial fishing sustainable have been a resounding success. Since our catch share program in the Gulf began in 2007, for example, the red snapper population has tripled.

But recreational fishing, which includes both individual anglers and large charter boats, is poorly managed, prone to overfishing and lacking in accountability. Last year, anglers in the Gulf of Mexico overfished their quota of red snapper by 25%.

Reform is stymied by the fact that recreational fishing is a \$36 billion industry, with tremendous political clout and a reputation for resisting change.

Local champions were needed. Enter Randy and Susan Boggs, the owners of Reel Surprise Charters in Orange Beach, AL, a popular fishing haven on the Gulf. “The old system wasn’t working,” recalls Susan. “We were getting crushed by failed management and shortened seasons.” So the couple committed themselves to making their fishery more sustainable, and in 2012 Randy worked with us to propose a novel approach to regulating the business.

“Recreational anglers talk about stewardship, but many don’t know what it means,” says Susan. “We wanted to be held accountable.”

The couple recruited other captains and in 2014

Hollywood actor Hilton Kelley returns to his Texas hometown to clean up polluting industries

ON A WARM MAY EVENING AT A GLEAMING community center only blocks from some of the world’s largest petrochemical facilities, Hilton Kelley warmly greets people one by one. Someone opens the back doors and the smell of acrid smoke drifts into the room. With the skill of an actor and the cadence of a southern preacher, Kelley begins to address the crowd.

“We’ve been stewing in this smoke for weeks, your children and grandchildren breathing in particulate matter, and we’re here to get your doctor bills paid, your children’s asthma medicine taken care of—and to make sure this never happens again,” he says, referring to a noxious fire that had been burning since Easter Sunday in a storage silo owned by German



helped launch a two-year pilot program for headboats, or large charter boats, in which participants could fish year-round in exchange for accepting strict catch limits. The flexibility of the new system appealed to many fishermen.

“We got a lot of flak initially,” says Susan, “but the program was a huge success.” For boats in the program, discarded fish that were too small or caught out of season—typically dead—dropped by nearly half, and revenues improved.

In an industry dominated by men, Susan Boggs has emerged as a force for reform. She is also tenacious. While the pilot program was under review, Boggs suffered a life-threatening illness that required 13 surgeries, yet she persevered.

“After what she’d been through, others might have left fish politics aside,” says EDF economist Dr. Daniel Willard, “but not Susan. She got right back into it.” Anyone who knows her is not surprised. After the BP oil spill tainted the Gulf in 2010, Susan and her husband plunged into coastal cleanup efforts.

Today, the pilot program they helped design could be a model for managing the for-hire fishing industry nationwide. Many challenges lie ahead, but with people like the Boggs by our side, there’s hope that the recreational sector will become sustainable. *Rod Griffin*

Leaving Wall Street to protect the planet

At age 19 Gina Melekh arrived in this country from St. Petersburg, Russia, with two suitcases and little money. After earning a degree in finance, she hit the trading floors of Wall Street. She was successful, but something was missing.

“My career was not satisfying my soul,” she says. She quit her job and moved to California to pursue an MBA in sustainability. “Most people get an MBA to get into banking,” she says. “I was the other way around—I got an MBA to get out of banking.”

After a 2014 stint in EDF’s Climate Corps program, which pairs graduate students with organizations looking to save energy, she became a business analyst at California utility Pacific Gas & Electric (PG&E), where she runs a project measuring the energy savings from efficient water use. One-third of the state’s energy goes to water management.

When Melekh was growing up in Russia, her mother washed and reused plastic bags. Upon coming here, she was shocked by the waste. “I’m a numbers person, so I look for the biggest quantifiable impact,” she says. “In sustainability, it’s energy. It’s amazing to be in energy in California, where we have the drive, the finances and the tools to open new frontiers.”



DOUG KAPUNIN

“There’s a huge fight ahead of us—but we’ve learned that when vulnerable communities have a voice, people in government listen.”

Pellets. The audience nods and claps.

“I’m a homeboy,” Kelley says proudly. Growing up in West Port Arthur in the shadow of the chemical plants and oil refineries, he thought the air reeking of sulfur was normal. After college and the death of his mother, he left to join the Navy and eventually ended up

as a successful Hollywood actor and stuntman.

On a visit back home, he was shocked to see how dilapidated the west side had become. And the air smelled as putrid as before. “I guess these industries never got the memo that they have to follow the rules,” says Kelly.

Back in California, the thought that someone had to do something gnawed at him. So in 2000, Kelley gave up his career to return to his old neighborhood, fighting for environmental justice in this low-income, largely African-American community. He founded the nonprofit Community In-Power

and Development Association (cidainc.org). He learned how to collect data on pollution levels and led protests, once wearing a hazmat suit and goggles. “There was such a void, environmentally speaking,” says Kelley. “No one was speaking up.”

It took him years of traveling to Washington and working with many allies, including EDF, but over time, Kelley made progress. “EDF is very professional,” he says. “By providing key policy points, they helped us make a strong case to EPA for tighter pollution rules.”

In 2007, he won a \$3.5 million lawsuit against the Motiva refinery here. The settlement funded a community center, health services and playgrounds.

Overall, he’s won settlements that have prevented 50,000 tons of pollution being emitted, and now travels the country, helping similar vulnerable communities. He also made history in 2011 when he won the Goldman Environmental Prize, the first African-American to do so.

“Things are a whole lot better than they were, but I’m still on the battlefield.” says Kelley.

Leslie Valentine

CHRIS STRANAN



“Weather events were becoming more extreme. ... I knew our farming needed to become more sustainable.”

SOIL HEALTH PARTNERSHIP/MICHAEL HICKS

The cop turned farmer restoring our wild places

DRIVING THE TRACKS OF HIS 3,000-acre Indiana farm, Brent Bible suddenly turns the wheel hard left. His red Ford pickup bounces onto open grassland. Bible has spotted a young bald eagle pulling at its prey and wants to see what it's caught.

"These birds were creatures of fiction when I was growing up," he says, as the eagle hovers overhead. "Now they're back. I am awed by nature's resilience."

Bible's sudden turn has taken him onto 60 acres of silvery native grasses and wildflowers. This is the part of his corn

and soybean farm he loves most. Deer, coyote, pheasant and quail abound. The waterways are alive with birds, frogs and fish. "I love to watch and learn from the wildlife," he says.

His land wasn't always like this.

Raised on a small Indiana farm, Bible studied agriculture in college. After 12 years as a police officer, he found himself drawn back to his farming roots. But he soon noticed something was awry.

"Weather events were becoming more extreme," he says. "Droughts and excessive rain were hurting crops. Too much fertilizer was getting into local waters and moving downstream. I knew our farming needed to become more sustainable."

Bible went to work practicing conservation tillage and strategies to use

nutrients more efficiently. He became one of EDF's farmer advisors and joined the Soil Health Partnership, to which EDF is a technical advisor. He then began experimenting with cover cropping—planting an extra crop during winter to reduce erosion. He also planted native grasses to create wildlife habitat.

The benefits were profound. "I've seen yield increases," he says. "My soil is more resilient and the Wabash river is cleaner too."

Most recently, Bible joined EDF's Monarch Butterfly Habitat Exchange program, through which farmers earn saleable credits for planting milkweed where the beleaguered butterflies can lay their eggs and caterpillars can feed. Bible also partners with Purdue University to allow students to work and learn on his farm.

"EDF provides a community of like-minded agricultural leaders who are working to achieve sustainable ends," Bible says. His farm, he says, is "a safe haven, a place where I can contribute to the vitality of nature while helping feed a growing population. Being environmentally responsible and economically successful are parallel goals."

Tasha Kosviner

Pediatrician Elizabeth Neary joins the fight for safe drinking water



DAVID NEVALA

In 2012, Dr. Elizabeth Neary retired from her practice as a pediatrician in Madison, WI, and began to investigate the risks to children of lead in the environment, which she calls "the most severe environmental health threat facing young children in the United States."

Lead exposure can impair children's brain development, contribute to learning and behavioral problems, and lower IQs. An estimated 500,000 children in the U.S. have elevated blood lead levels. The culprit: lead paint in old buildings and lead pipes that carry drinking water.

Neary, who has three young grandchildren, is particularly concerned about the safety of the drinking water in Wisconsin's schools and daycare centers. She is fighting for passage of a bill in the state legislature that will make it easier for utilities to replace lead service lines. EDF is working with a number of other organizations to speed the replacement of these lines nationwide.

"We know what the problem is," says Neary, who has become an effective ally of EDF. "We know how to fix it. Now we need the political will to do it."

EDF to Congress: Stand strong for our endangered species



ISTOCK

With its nearly 10-foot wingspan, the California condor—a beneficiary of the Endangered Species Act—can soar up to 15,000 feet.

The Endangered Species Act, which has kept hundreds of America’s plants and animals from going extinct, is itself in danger. EDF is fighting to keep the law strong.

HELD SACRED BY NATIVE Americans in the West, the magnificent California condor was virtually extinct in 1987. The last ones were captured, and thanks to a captive breeding-and-release program, today North America’s largest bird is making a remarkable comeback. The total population grew from 27 birds in 1987 to 446 in 2016.

Saving the condor was possible because of the Endangered Species Act, a bipartisan bill signed into law by President Richard Nixon in 1973. The law affirmed America’s core value of respect for all life on Earth and served as a solid foundation for conserving biodiversity.

Today, more than 1,600 plants and animals are protected—and nearly 1,200 have active recovery plans. Iconic species like the gray whale, stellar sea lion and the bald eagle have recovered.

Serious attempts have been made to weaken the Act before, but each time EDF and others defeated those attempts. And we introduced incentives for landowners to conserve species on their land. As a result, farmers and ranchers have stepped up to improve habitat for rare plants and animals on millions of acres.

Despite this progress, members of Congress have introduced a total of 24 bills since January to weaken or dismantle the Act.

One proposal would give politicians

in Congress—not biologists—the authority to approve or drop a species from the endangered species list, putting the core goal of the Act—to conserve species based on the best available science—in danger. Rep. Rob Bishop (R-UT), chair of the House Natural Resources committee, has made no secret of his intention to “repeal and replace” the law with one that would make extinctions more likely.

“The threat to the Endangered Species Act is much greater now than it has been in the past 29 years,” says Michael Bean, one of the top authorities on the Act who ran EDF’s wildlife program for many years. The attacks come even though nine out of 10 Americans want the Act strengthened or left unchanged, according to a 2015 poll. “Care for nature is still very much a core value of heartland America,” says David Festa, EDF’s senior vice president of Ecosystems.

That’s why EDF has launched a major campaign with partners who believe saving wildlife from extinction is a duty. EDF Action, our political advocacy partner, has ramped up lobbying efforts with potential champions in Congress. If the Trump administration abandons the rule of law, our team of lawyers will hold it accountable in court. We’re also

engaged in efforts by the Western Governors’ Association to find ways to make the Act work better for wildlife and people.

In addition, EDF is working to recover animals before they reach the endangered species list. “While the Act is absolutely vital, it operates like an emergency room, not as preventive care,” says Eric Holst, EDF Working Lands director.

To prevent listings in the first place, EDF is creating incentives for landowners to preserve habitat. Three-quarters of endangered species reside on private lands. Among them is the greater sage grouse. We’re partnering with energy companies, cattlemen’s groups and state agencies to preserve its sagebrush habitat.

None of these efforts will succeed without the clout of a strong Endangered Species Act behind them. Says Festa: “EDF will make sure that endangered species are protected.”

Leslie Valentine



GETTY

Another beneficiary: California sea otters went from 50 survivors in the 1930s to 3,000 today.

The hidden chemicals in our food



Tom Neltner is EDF's chemicals policy director. He works to remove hazardous chemicals from the marketplace and focuses on food additive safety.

There's much more to our food than meets the eye—or is printed on the label.

Approximately 10,000 chemicals

are added to our food. These substances are used to flavor, color, preserve, package, process and store food. While some of these additives are harmless, others are downright dangerous—linked to reproductive problems, developmental issues and cancer. No matter where you shop, your family's health may be at risk.

The Food Additives Amendment of 1958 gave the Food and Drug Administration (FDA) the authority to regulate food additives. Unfortunately, the flawed 59-year-old law, coupled with weak enforcement, has allowed thousands of chemicals to be added to food with little oversight and limited safety information.

The upshot is that FDA has no way of knowing what chemicals are actually being used in which food or in what quantities—even in baby food.

The law exempts ingredients “Generally Recognized As Safe” from FDA approval, which the agency interprets as meaning it has no role in ensuring the safety of an estimated 1,000 substances.

To fix our broken food system, we must:

■ End secrecy

Companies should not be permitted to decide the safety of ingredients without FDA's review or the public's knowledge.

■ Update the science

FDA needs to ensure that additives are assessed using modern scientific methods.

■ Ensure existing chemicals are safe

Thousands of chemicals were approved by FDA decades ago. FDA needs to reassess their safety.

EDF, in collaboration with other environmental and public health organizations, is working to strengthen the 1958 law. But to protect public health, companies need to lead on removing the worst chemicals. So EDF has been working behind the scenes with a number of large retailers—including Walmart—to improve the safety of food additives nationwide.

>>> READ MORE >>> edf.org/HiddenChemicalsDiet

Bon appétit?



BPA

Can lining

Endocrine disruptor, reproductive toxicant, range of health issues



Perchlorate

Antistatic additive in dry foods packaging

Endocrine disruptor, interferes with brain development



Benzophenone

Artificial flavor used in baked goods, dessert, beverages & candy

Possible human carcinogen



Methyl eugenol

Artificial flavor used in baked goods, jellies, candy & drinks

Human carcinogen



Synthetic dyes

Food and drink color

Associated with behavioral changes in susceptible children



Ortho-phthalates

Used in food contact materials

Endocrine disruptors, may decrease IQ



Profiting from conservation

If we really want to see farmers embrace conservation practices, we need to make it easier, not harder, for them to make a living while doing so. edf.org/FarmerProfit



Bad policy: The plan to cut NOAA's budget

The Trump administration's proposal to slash funding for the most important forecasting and storm prediction programs has set off alarms. edf.org/BadPolicyNOAA



"The Paris Agreement is completed!" declared a sign on the Arc de Triomphe in 2015. Many businesses supported the agreement and are now keeping the momentum going.

Business steps up on climate

ON MARCH 28, PRESIDENT TRUMP, flanked by cheering coal miners, signed an executive order to roll back climate protections put in place by President Obama. The following day, Mars Inc., the maker of M&Ms and Snickers, responded: "We believe the science is clear and unambiguous: climate change is real and human activity is a factor," said spokesman Edward Hoover. "We're disappointed."

American business has not always been a vocal ally on climate, but that's changing. Many leading businesses are making the case for long-term resilience over short-term politics. Mars, for example, sees climate change as a threat to raw materials like cocoa. As companies assess the risks climate change poses, they are demanding clean energy from utilities and lower greenhouse gas emissions.

More than 1,000 companies and organizations signed a statement urging the new administration to address climate change and remain committed to the Paris climate agreement. EDF helped recruit corporations to sign on to the statement. And last year, a group of technology companies, including Amazon and Apple, filed an amicus brief in support of the Clean Power Plan.

In June, Trump announced that the U.S. was pulling out of the Paris Agreement, causing consternation not just among environmentalists but among

many business leaders, as well.

"I absolutely disagree with the administration on this issue," said JPMorgan CEO Jamie Dimon.

Companies are not just talking about supporting the Agreement; they're acting to slash emissions. With EDF's help, Walmart set a goal this year of cutting its greenhouse gas emissions by one gigaton (a billion tons) from its supply chain by 2030—the equivalent of removing the annual emissions of Germany from the atmosphere.

Smithfield Foods, the world's largest pork producer, has announced plans to cut emissions 25% by 2025. EDF worked with Smithfield on this goal.

"We've learned a lot working with EDF," said Kraig Westerbeeck, a Smithfield vice president. "They made a lot tougher demands on us than we were initially comfortable with, but over the years I developed a deep appreciation for EDF's mission."

U.S. business has good reason for concern. With China investing \$360 billion in renewables, America simply cannot afford to move backward on the environment or the economy while other countries capitalize.

It's an argument that should give Trump and his allies pause as he backs out of the Paris Agreement and attempts to dismantle federal policies addressing climate change.

'REGULATION' IS NOT A DIRTY WORD

By Frank Convery, EDF Chief Economist

The "deconstruction of the administrative state" is an ambition of White House strategist Steve Bannon. To many in the current administration and Congress, this seems to translate into doing away with regulation almost entirely. But history teaches us two things: the market on its own will not protect the public interest when it comes to our environment and those resources we share in common; secondly, how we regulate to protect this public interest is crucial to its success.

One example of the power of sensible regulation is recounted by EDF's Miriam Horn in her book *Rancher, Farmer, Fisherman*. Wayne Werner, a Gulf Coast fisherman, tells how his life was transformed when his fishery switched from a flawed regulatory regime—using tactics like ever-shorter fishing seasons—to catch shares. Catch shares allow year-round fishing while strictly limiting the total catch, assigning each fisherman a percentage share. Since the change, Werner's catch has more than doubled, prices at the dock have been higher and his costs have dropped. Fewer dead fish are now thrown overboard. And all of this because of smart regulation, which gives fishermen a financial stake in the health of the fishery. The conclusion is clear:

Bad regulation = destruction of nature and a failing economy.

Smart regulation = conservation of nature and economic vitality.

>>> READ MORE >>> edf.org/wilson



This regular column honors the memory of Robert W. Wilson, a longtime EDF supporter and champion of harnessing market forces to drive environmental progress.

How science is helping solve the world fishing crisis

ALAMY



About 80% of fish globally come from fisheries lacking scientific assessment.

EDF is providing science-based advice to fishermen and governments. Our goal: to make fishing sustainable in countries that account for two-thirds of the global catch.

MYANMAR IS ONE OF THE WORLD'S most vulnerable nations to overfishing and climate change. The livelihoods of millions depend on the sea, and fisheries are an important engine of economic development. But once-abundant fisheries are in danger of collapse.

On a recent scientific expedition, Dr. Doug Rader, EDF's chief oceans scientist, was awed by Myanmar's beauty, but also struck by the extreme dependence on fisheries, as fishermen scrambled to catch even juvenile fish. Overfishing also threatens the incredible coral reef and mangrove ecosystems of the Bay of Bengal and Andaman Sea.

As the world's population increases and the demand for seafood rises, the United Nations reports that many of the world's fisheries are now fully exploited or facing collapse. Many small-scale fishing communities that account for nearly half the global catch lack the tools to manage their fisheries sustainably.

In response, EDF established the Fishery Solutions Center, a brain trust of

more than two dozen scientists, economists and policy experts committed to improving fisheries management worldwide. The Center has evolved into a global clearinghouse for data and visionary ideas on ocean protection.

"One of the best ways to solve the worldwide fishing crisis is to give local leaders cutting-edge science and management solutions and help them apply these solutions in their fisheries," says Dr. Andrew Hutson, the Center's senior director. Collecting data to assess the health of a fishery can be expensive and beyond the means of many developing countries.

EDF experts and their partners have developed a comprehensive toolkit—including software, training manuals and case studies—that allows users in data-limited fisheries to conduct quick and inexpensive analyses that can provide the scientific basis for sustainable fisheries management.

With our partner, the Wildlife Conservation Society, EDF has launched an initiative to create models of sustainable fishing in Myanmar at four pilot

sites. We are also advising regional governments as they revise their inshore fisheries laws.

"The starting point is local knowledge," says Dr. Rod Fujita, director of research and development for EDF's Oceans program. "This knowledge from the local fishing communities can be combined with external data and analysis to support management even when data from the fishery are scarce."

Some of the information comes from unlikely sources. In Belize, for example, the scientists obtained data from scuba divers. "This was a breakthrough," says Fujita. "It's a rich data set, but had never been used before in fisheries management." After analyzing the data on conch abundance and landings, the

Belize Fisheries Department closed the conch season earlier than usual in 2015, responding to scientific evidence that the fishery could collapse.

Last year, the Center helped Belizean officials design the country's national multispecies catch shares system, the first in the developing world. It's based on a pilot project that reduced illegal fishing by 60% while increasing legal catch, and we expect to see the same results from the national program.

Globally, our staff have trained more than 700 fishery leaders in countries from Mexico to Spain to Indonesia in how to apply science to solve their own challenges. This summer, EDF scientists Sarah Poon, Jeffrey Young and Dr. Kendra Karr will be rolling out online e-courses as a prelude to in-person training.

"We're looking to reform through virtual learning," explains Fujita. "Too often science exists in a vacuum—we've made science an integral part of government decisions."

As new challenges arise, the Center is poised to propose innovative solutions. "The oceans are resilient," says Fujita. "Fish populations have been around for several hundred million years. If we let them, they will recover."

Rod Griffin



ISTOCK

This year marks the 10th anniversary of the landmark Supreme Court decision granting EPA the authority to regulate global warming pollution, siding with EDF and allies.

When the Court got it right

EVERY SO OFTEN, THE U.S. Supreme Court profoundly alters the course of history. For civil rights, that happened with *Brown v. Board of Education* (1954). For the fight to protect our communities against climate change, it may well be *Massachusetts v. EPA* (2007).

In that historic decision, the Court ruled that greenhouse gases are air pollutants covered by the Clean Air Act. In a 5–4 vote, the Court held that EPA not only has the authority to regulate warming gases, but is obligated to if the science indicates they endanger public health.

The ruling serves as a foundation for all of EPA's subsequent actions to curb heat-trapping emissions, whether from automobiles, power plants, or oil and natural gas facilities.

EDF has been there every step of the way, beginning with the lawsuit that ultimately led to *Massachusetts v. EPA*. In 2003, we joined a coalition of 12 states and other groups, led by Massachusetts, to sue EPA for denying a petition to limit greenhouse gas emissions from motor vehicles because the agency claimed it lacked authority to regulate this pollution under the Clean Air Act.

Following the Supreme Court's decision in *Massachusetts*, we worked to secure the science-based finding that the Court had called for. In 2009, after

examining everything from the potential for more damaging hurricanes to death rates due to heat exposure, the agency concluded there was “compelling” reason to believe that warming pollution threatens public health. This determination, known as the “endangerment finding,” rested on thousands of pages of peer-reviewed research. EDF then joined a broad coalition to defend the agency's finding against a barrage of legal challenges filed by polluters and their allies. In 2012, a federal appeals court upheld the endangerment finding as based on an “unambiguously correct” view of the law and supported by a “substantial scientific record.”

“EPA's obligation under the Clean Air Act is a settled question in American law,” says EDF attorney Tomás Carbonell.

During his confirmation hearing, EPA administrator Scott Pruitt said he would not attempt to overturn the endangerment finding. “It is there, and it needs to be enforced and respected,” he said.

Nevertheless, the Trump administration has taken aim at key public health and climate protections—such as the Clean Power Plan—that flow from the endangerment finding. If the administration tries to roll back these vital safeguards, EDF will fight every step of the way to protect our communities and ensure a safer climate for our children.

Have you included EDF in your will?

Make a lasting contribution toward protecting the planet for generations.

Contact our Planned Giving team to learn more, and join the Osprey Society today.

Toll-free: 1-877-677-7397
legacy@edf.org | edf.org/legacy



PHOTO: ERIC SAMBOL



GETTY

Make a splash, save a river

AMERICA HAS MORE THAN 3.5 million miles of rivers and streams, from the 2,340-mile-long Mississippi to Montana's 200-foot-long Roe River. By some measures, American rivers are getting healthier, due in large part to the Clean Water Act, but there's still a lot of work to do. EPA's latest National Rivers and Streams Assessment found that 46% of America's rivers and streams are in "poor" biological condition. Just 28% rated "good."

The main problem is runoff and dumping from development, as well as nutrient pollution—much of it from excess fertilizer used on farms.

The nutrients cause low oxygen levels that kill aquatic life and stunt shoreline vegetation. Higher temperatures from climate change also play a role. Warmer water (combined with excess nutrients) accelerates the growth of toxic blue-green algae.

Fortunately, there's a lot EDF members can do to return our waterways to health.

■ Join the fight!

Educate yourself about the myriad threats to the nation's waterways, and advocate for legal solutions at both the local and national levels. The need is particularly urgent right now because

the Trump administration is trying to undermine enforcement of the Clean Water Act. You'll find that local officials are often receptive to well-documented presentations on local pollution.

Two groups offer excellent, nationwide support. American Rivers can help you get up to speed on the threats facing rivers. The Waterkeeper Alliance has great legal advice and information on the connection between industry and water health.

■ Organize locally

Form a multigenerational group to protect the rivers where you live. Think strategically before your first meeting. Invite swimmers, fishermen, boaters, hikers—and don't forget schoolteachers and kids and local officials. Hold joint events with other organizations, and use your collective clout to sway politicians on the local, state and federal level. If you decide on a cleanup, register your plan with American Rivers' National River Cleanup to get free trash bags, help with media coverage and technical support.

■ Don't forget your wading boots

The summer cleanup season is upon us and there's a good chance a river cleanup is under way near you.

Last year, the National River Cleanup registered 1,953 events and mobilized 47,648 volunteers to remove 3.4 million pounds of trash. Groups also planted native trees and shrubs to slow runoff and help restore wildlife habitat.

It can be hard work. "We have crews in canoes and on riverbanks, and they take out tons of plastic and other pollutants," says Captain Bill Sheehan, the Hackensack, NJ, Riverkeeper. "It's a never-ending battle."

Chad Pregracke, the founder of Living Lands & Waters, which has cleaned up rivers in 20 states, says, "I tell people they should selfishly volunteer—because they just might find out what they want to do with their lives." So get out there and get to work.

Jim Motavalli

BE A FRESHWATER HERO

Riverkeeper was formed to defend the Hudson River. Its success spurred an explosive growth of similar grass-roots programs. riverkeeper.org

Living Lands & Waters has mobilized more than 98,000 volunteers to clean rivers. livinglandsandwaters.org

Western Rivers Conservancy acquires land to protect outstanding river systems in the West. Its motto: "Sometimes to save a river you have to buy it." westernrivers.org

American Rivers combines national advocacy with field work in key river basins. It sponsors the National River Cleanup. americanrivers.org (bit.ly/2taqv9N).

Waterkeeper Alliance was founded to support the Riverkeeper network and hundreds of other organizations fighting for clean water in rivers, lakes and coastal waterways. It has affiliates in 41 states. waterkeeper.org

Jim Motavalli writes regularly about green products for leading publications. The opinions are the author's.



BE HEARD!

Don't give 'em a break! Making the most of the Congressional summer recess

Town halls and in-person conversations are a great way to influence your representatives. Take advantage of the Congressional recess (July 31–Sept. 4) and get your elected officials on record about environmental concerns. You have more power than you think!

- 📣 Attend meetings of your own members of Congress. To find town halls, check their websites, sign up for emails or follow them on social media.
- 📣 Recruit a team of at least five people to join you. Formulate different questions and spread out across the room.
- 📣 Before asking your question, tell your own personal story. This connects dry policy to the lives of real people.
- 📣 Ask a clear yes-or-no question, and thoroughly vet the facts related to your question. Practice!
- 📣 Always press for a coherent answer. You want your member to take a public stance. Be polite, but relentless.
- 📣 Take photos and video. Share them on social media right away.
- 📣 Don't get baited into an argument. Stay focused on your representative and your message.

SOURCES: CAP ACTION, MOVE-ON.ORG, TOWN HALL PROJECT, INDIVISIBLE



LESLIE VON FLESS

EDF Action's Advocacy Boot Camp, a fast-track tutorial on how to better defend the planet.

Boot camp for climate warriors

Twenty-six-year-old graduate student Laura Hersch believes in the traditional Jewish obligation to leave the world a better place than you find it. Enrolled in an advanced program in energy and climate policy at Johns Hopkins University, she sees her future in the environmental movement: "This is going to be my life's work," she says.

In late April, Hersch joined other activists for EDF Action's first-ever Advocacy Boot Camp, held the day before the Peoples Climate March in Washington, which drew 200,000. The training event featured Washington insiders, as well as expert EDF staff, who offered advice on how to become a strong advocate for the planet. The guidance included tips on building relationships with Congressional staff, telling personal stories that persuade lawmakers and fighting back in the age of Trump.

Abby Tylor, a former teacher and now a stay-at-home mom, attended the training and spoke about her nephew, recently diagnosed with childhood leukemia. Tylor did some research and discovered that air pollution is a major risk factor for the disease. Her

nephew is now recovering, with a good prognosis, and Tylor is devoting her free time to stopping the Trump agenda on the environment.

"If we are going to serve our youth well, we have to protect them, just as we would if they fall and scrape their knee," she says.

The day after the Boot Camp, EDF's political team hosted another first-ever training session, this one designed for people who intend to run for public office. Among those attending was a U.S. Air Force veteran planning a run for Congress in Texas and John

McKeon, a New Jersey state assemblyman who sits on the legislature's environment committee. McKeon came to sharpen his political skills.

"The people worried about preserving the environment, endangered species, quality of life issues—those people are already with you," he says. Instead, he stresses making clear to voters the connection between the environment, health and economic growth.

"Those are always my arguments, and they tend to resonate a little bit more," McKeon adds. "EDF is unique in thinking that way."



LESLIE VON FLESS

EDF member Laura Hersch: "This is going to be my life's work."

Alive...thanks to the Endangered Species Act

The whooping crane was once down to 15 birds worldwide, but today it has rebounded to about 600 birds. It's one of many success stories of the Endangered Species Act.



**Please call your member of Congress.
Tell them not to cripple the Endangered Species Act!**