One sweltering night last summer, 12-year-old Robert Smith was whisked from his bed to a New York hospital, gasping for breath. His asthma was aggravated by air pollution. For millions of Americans like Robert who suffer from respiratory ailments, a clean-air case now before the U.S. Supreme Court has significant implications.

In 1997, the Environmental Protection Agency set new air quality standards to reduce soot and smog-causing ozone. Last year, the American Trucking Association successfully challenged the standards in court, claiming that Congress had no right to delegate standard-setting authority to EPA. The case, now on appeal, could have serious consequences for the air we breathe. For decades, EPA has set national air quality standards based on health impact, not on cost. Cost came into play only when deciding how to enforce standards. Now industry wants to make the standards themselves subject to cost-benefit comparisons. Environmental Defense was the only national environmental group to submit “friend of the court” briefs to the Court, which considered the case last month. The justices were skeptical of the industry position. When an industry lawyer said he didn’t know how to “live in a world of limited resources” without weighing costs and benefits, Chief Justice William Rehnquist replied dryly, “Well, we have lived with it for 20 years.”

“Industry claims that costs don’t count in the Clean Air Act,” says our attorney Vickie Patton. “But state and local enforcement of air standards expressly requires that costs be considered.” Moreover, since passage of the act, air pollution has been cut by one-third while the economy has boomed. A decision on the case is expected by June.

More on the web: www.environmentaldefense.org/more/10530.
As you look out to the new century’s environmental horizons, I urge you to consider the experience of your predecessors: To succeed, one must think globally and lead by example. What we do about our own pollution will be closely watched by the other countries we’re asking to help with global warming, marine reserves and endangered species.

On global warming, you will need to restart the negotiations to implement the Kyoto Protocol. Your direction to the American negotiators should be to conclude an agreement that uses incentives to achieve greenhouse gas reductions. At home, you should quickly introduce legislation to clean up the “big four” pollutants (NOx, SOx, CO2 and mercury) from power plants, as you’ve promised. This will reduce greenhouse gases and protect public health.

You have the opportunity, given recent disclosures, to move boldly and reform the Army Corps of Engineers. It is also time to introduce a new Farm Bill that redirects subsidies to conserve our environmental heritage.

We must not retreat on the gains already made. You should pledge to veto any stealth attempts by Congress to attach riders onto bills without public hearings. You should move to protect our remaining pristine areas from exploitation.

Such an agenda will reflect America’s enduring commitment to our natural inheritance.

—Fred Krupp

Most people know that bacteria from uncooked chicken can cause a nasty case of food poisoning. What many don’t know is that antibiotics are losing their effectiveness against such illnesses. Bacteria have developed increasing resistance to fluoroquinolones, the antibiotics often used to treat severe gastrointestinal infections. Part of the problem is the unnecessary overuse of these drugs on farm animals.

When poultry farmers started routinely feeding these human antibiotics to chickens and turkeys in 1995, an estimated one percent of the people treated with fluoroquinolones had illnesses resistant to the treatment. But by 1999, that figure had risen to nearly 18 percent, affecting an estimated 11,000 Americans.

To keep Americans from ingesting these “superbugs” along with their drumsticks, the U.S. Food and Drug Administration has proposed banning the use of fluoroquinolones in poultry. Numerous health professionals and organizations, including the American Medical Association, have joined Environmental Defense in advocating such a ban.

“This marks the first time in decades that FDA has proposed action to limit antibiotic use in animals because of concerns that such use will contribute to resistance in humans,” says our attorney Karen Florini. FDA acted because it has linked farm use of fluoroquinolones to the development of resistant bacterial strains.

Abbott Laboratories, one of the two makers of the drug used by poultry farmers, has agreed to withdraw its product from the market voluntarily. The other manufacturer, Bayer Corporation, instead requested a public hearing, initiating an appeal process that could take months or years. “Rather than playing chicken with public health, Bayer should act responsibly and comply voluntarily with the ban,” urges Environmental Defense scientist Dr. Rebecca Goldburg. Using our email Action Network, more than a thousand of our members have already sent faxes petitioning the company, better known for its Bayer aspirin and Flintstones vitamins, to do the right thing.

**TIP OF THE ICEBERG**

The poultry affair is just the tip of the iceberg of antibiotic resistance. “Resistance develops when antibiotics are overused, both by doctors treating people and by farmers treating animals,” Goldburg notes. “An estimated
40 percent of the nation’s antibiotic use is for livestock. Most of that is not even being used to treat sick animals, but rather to promote faster growth and compensate for unsanitary conditions on crowded factory farms.” Most of the birds treated are not sick at all.

Working closely with other groups, Environmental Defense has launched a national campaign to increase public awareness and address the problem of antibiotic resistance. The campaign seeks to phase out agricultural use of medically important antibiotics as “growth promoters.”

We are also promoting national regulations to prevent antibiotic-resistant pathogens from entering the water supply. This is a serious problem in agricultural areas where antibiotics are used extensively on factory farms. Animal waste is frequently sprayed onto hayfields as fertilizer. From there, the waste and the drug-resistant germs it contains can seep into the water table and contaminate drinking water.

Unless we take action now, Florini warns, we run the risk of returning to the days before penicillin and other wonder drugs, when minor infections often proved lethal. “Children, the elderly and people with depressed immune systems are the ones who are vulnerable,” she says.

More on the web: Take action! Send a fax message urging Bayer to comply with the FDA ban on fluoroquinolones in poultry. Just visit www.environmentaldefense.org/more/10531 to make your voice heard.

For Julia Hill, protecting forests means protecting the planet. Change our values, and we will. The carbon economy is likely to reach $10 billion in the next decade.

Q: What are the risks of carbon sequestration?
A: Some corporations are jumping on the bandwagon and saying that cutting down old-growth forests and planting tree farms is great for the environment and ought to count as carbon sequestration. A tree farm is not a forest! The first thing in carbon sequestration is conservation. A native forest has phenomenal value as a carbon sink.

Q: What would you like to see come out of the climate conferences?
A: We need independent watchdogs for carbon sequestration. Laws are only as good as enforcement and we must make sure that the landowners getting the money are the ones doing it right. I am optimistic. With independent monitoring by scientists and local groups, we’re going to see a radical shift in how people do business. Our economy will finally begin to reflect the values necessary for life on earth.

How a carbon market took shape atop a California redwood tree

Julia Butterfly Hill represents the purest breed of environmental activist. She spent two years atop a giant redwood tree defending it against loggers. Enduring storms and snowfalls, she finally prevailed upon the timber company to preserve the stand of 1000-year-old trees.

So why has this environmental “saint” now embraced market methods? While still in the tree, the 26-year-old Hill helped start a carbon sequestration company, Carbon Trading and Trust. The idea is to create monetary value for the carbon that is stored in trees and soil, so that less is released to the atmosphere as heat-trapping carbon dioxide.

Hill’s company has signed an agreement protecting redwoods in California and is now raising money to create a vital elephant corridor in Sri Lanka. She spoke with us shortly before the recent climate conference in The Hague.

Q: Should we assign monetary value to ecosystems?
A: It’s a very touchy subject to bring money into ecology. People are upset because they see that our economy has been feeding off our natural life support system. But the reality is our world functions with money. We need to financially reward carbon sequestration and other natural systems that purify our land, air and water.

Q: Should we reward big business for engaging in carbon sequestration?
A: Yes, we should. Because right now we give subsidies. The Clinton administration has spent $1.2 billion logging forests on public land. What are we thinking? We need to

If antibiotics fail, many common illnesses could become killers.

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Choosing parks over industry

“They paved paradise and put up a parking lot,” folksinger Joni Mitchell wrote of Los Angeles. But some unspoiled land remains. The most significant plot is a 47-acre former railroad yard near downtown known as the Chinatown Cornfield. The Cornfield was slated for fast-track development as industrial warehouses until a coalition that Environmental Defense helped build challenged the plan and proposed a park and school as alternatives.

Our legal challenge to the developer, Majestic Realty, convinced the Department of Housing and Urban Development to withhold $12 million in federal subsidies, pending a full environmental review. We argued that industrial development would discriminate against the low-income residents of the neighborhood, which has no parks or secondary schools.

Air pollution from trucks using the warehouses could sicken children and the elderly, we argued, and runoff would pollute the L.A. River. Our coalition’s efforts have borne political fruit. Four of six Los Angeles mayoral candidates have endorsed a park for the site. A fragile consensus is forming that if money is found to buy the land for community uses, the developers will withdraw. “The Cornfield’s environmental potential has captured the city’s imagination,” said our attorney Jerilyn Mendoza.

Quick action helps save turtles

Sea turtles may appear ungainly on land, but they are graceful swimmers underwater. That is, until they encounter fishing nets. In North Carolina’s Pamlico Sound, a large number of endangered Kemp’s ridley, loggerhead and green sea turtles became entangled in nets, prompting the state Division of Marine Fisheries to close down the southern flounder fishery.

Environmental Defense applauded the closure, which was triggered by data linking the turtle deaths to the use of large-mesh gillnets. “Gillnets are efficient at catching flounder,” says marine ecologist Dr. Michelle Duval of our North Carolina office, “but unfortunately they trap other species as well.” Last year, 97 sea turtles washed ashore along Pamlico Sound, many of them victims of the massive nets, called “walls of death.”

The crucial data on turtle mortality came from an on-board observer program that Environmental Defense helped bring about. “A well-designed observer program can provide much-needed information on all types of unintended mortality in this fishery—not just sea turtles,” says Duval.

After just six weeks this fall, sufficient data had been collected to warrant closure of the fishery. Duval noted that modifying net gear and altering where nets are deployed would protect turtles without harming the flounder fishery.
An opportunity missed on global warming

At last month’s climate talks in The Hague, a protester tossed a cream pie in the face of the top U.S. negotiator Frank Loy. But a far greater affront occurred at the end of the parley when negotiators from 175 countries failed to reach accord. “This was tragic,” lamented our executive director Fred Krupp, who led a 19-member delegation.

The meeting was supposed to flesh out the Kyoto Protocol, the treaty committing industrialized countries to cut greenhouse gas emissions to 5 percent below 1990 levels. Marathon negotiations brought the U.S. and European Union to the brink of success, bridging differences on several key issues such as penalties for non-compliance.

The talks foundered over how much credit toward emissions targets countries should get for using forests and farmland to absorb carbon dioxide, the main greenhouse gas. Rather than focusing on new efforts to grow trees and protect threatened tropical forests, the U.S. initially sought to take credit for existing forests, amounting to half its target. The European Union objected, claiming this was a back-door way for the world’s biggest emitter of greenhouse gases to avoid making cuts. The Europeans were unprepared to deal with subsequent more reasonable U.S. counteroffers, spelling doom for the agreement.

While the nations bickered, seven major companies joined our Partnership for Climate Action and agreed to make voluntary greenhouse gas reductions.

The big stink over hog waste: Is the end in sight?

Factory farms across America generate more than two million tons of animal waste per day, much of it finding its way into our rivers and drinking water. Nowhere is this problem more acute than in North Carolina, where 4,000 open-air lagoons store hog waste and pose recurrent public health and pollution concerns. Environmental Defense has spearheaded a broad campaign to change the way factory farms will be run in the near future.

We won a big victory in North Carolina this summer when the state, with help from us and others, persuaded the world’s largest hog producer, Smithfield Foods, to eliminate lagoons on its 276 farms within five years. Based on our recommendations, state regulators then began advocating similar controls at all large farms statewide. But other major corporate hog producers balked at the idea of replacing lagoons, claiming that cleaner technologies were impractical.

“This logjam threatened to unravel the whole process,” said our economist Kathy Cochran. So we conducted the first major comparative analysis of waste disposal technologies. The study, Dollars and Sense: An Economic Analysis of Alternative Hog Waste Management Technologies, concludes that new technologies will increase pork production costs by only pennies per pound while protecting the environment and public health.

“This report moves the debate forward,” said Dewey Botts of the state Department of the Environment and Natural Resources. The report calls on hog processors like Smithfield to share responsibility for managing hog waste; currently much of this burden falls on the backs of contract farmers. To eliminate waste lagoons elsewhere in the country, we are working with a coalition of 200 groups from 44 states. Our aim: to press EPA to strengthen pollution rules for factory farms nationwide. “People who live near factory farms will declare victory only when lagoons are gone for good,” said our attorney Daniel Whittle.

More on the web: Links to our Hog Watch web site are at www.environmentaldefense.org/more/10532.
Get hooked on healthy and abundant varieties of fish

Many of the fish we love to eat are disappearing from the world’s oceans. By one estimate, 70% of the world’s commercially fished species are being harvested so intensively that their populations can no longer be sustained. Does this mean we all should stop eating fish? No, but with a little care, consumers can make a difference if they make the right choices.

Choosing fish species that are abundant and well-managed supports sustainable fishing and responsible aquaculture. It also takes pressure off depleted fish stocks that Environmental Defense and others are trying to conserve through fishing limits and the creation of marine reserves.

**OUR NEW GUIDE HELPS CHEFS AND AT-HOME COOKS**

About two-thirds of all seafood sold in the United States is bought by chefs for use in restaurants. Chefs’ choices also influence at-home cooks, who try making dishes they’ve enjoyed while eating out. Recently Environmental Defense joined with Chefs Collaborative to produce the first hands-on guide for chefs who want to steer clear of overfished species. Peter Hoffman, a member of the nationwide network of chefs that promotes sustainable cuisine, approached our biologist Dr. Rebecca Goldburg. A solutions-oriented partnership between the two organizations was born.

The new publication is called Seafood Solutions: A Chef’s Guide to Ecologically Responsible Fish Procurement. It offers tips for selecting seafood and lists suppliers of sustainably harvested fish. It’s also useful for amateur cooks. A handy list of “Fish Pick” questions lets shoppers know what to ask for in both farmed and wild-caught seafood. The guide also recommends tasty substitutes for dwindling species (such as striped bass or farmed catfish in place of disappearing orange roughy and Chilean sea bass).

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**Thinking of fish for dinner?**

To help you decide what to buy, we’ve listed some of the best and worst seafood choices for the environment. Because production practices vary widely for certain types of fish (tuna, for example), this list is limited to species for which fishing or fish-farming practices are consistently sound—or unsound.

### BEST TO CHOOSE

- Anchovies
- Atlantic herring
- Bluefish
- Catfish
- Crab—blue, Dungeness and stone
- Crawfish
- Mackerel—Spanish and Atlantic
- Mahi mahi
- Mussels—farmed*
- Pacific halibut
- Oysters—farmed*
- Sardines
- Shrimp/prawns—Northern Maine and trap-caught Spot prawns
- Striped bass—farmed and wild
- Tilapia
- Wild salmon from Alaska

### BEST TO AVOID

- American lobster
- Atlantic cod
- Atlantic halibut
- Chilean sea bass/Patagonian tooth fish
- Farmed salmon
- Grouper
- Monkfish
- Orange roughy
- Pacific rockfish
- Shark
- Shrimp/prawns—farmed & most wild
- Skate
- Snapper
- Swordfish

*If possible, try to find shellfish from farms that use racks, nets or lines suspended in the water. Shellfish raised on bay bottoms are often harvested by dredging, which destroys bottom habitat.

Restaurant owner Peter Hoffman wanted to help conserve depleted seafood stocks.
Food safety faces a sneak attack

How does a bill that only industry lobbyists could love make it through Congress? In the dark, of course—often as a so-called rider to one of the must-pass bills that are necessary to keep government running.

One such stealth bill now in the works is the National Uniformity for Food Act. Propelled by the powerful food industry, it seeks to override state food-safety laws that are more rigorous than sometimes-weak federal standards. Although laws in 20 states are in jeopardy, the bill’s real target is California’s Proposition 65, a right-to-know law that Environmental Defense was instrumental in crafting.

Since Prop. 65 was passed in 1986 as a ballot proposition approved by California voters, the food industry has worked relentlessly to overturn it. Again and again, we and our allies have scrambled to block these efforts. This year, the industry’s strategy was different. The Food Act (S.1155) was disguised as non-controversial housekeeping legislation and sailed through the Senate Agriculture Committee on a voice vote without advance notice or testimony. But we notified key senators and made the issue controversial. With little chance of passage as a separate bill, S.1155 then became “rider fodder”—legislation that could surface again at the last minute, clinging to another bill and hoping for enactment without scrutiny.

In the final hours before Congress recessed in October, the industry’s strategy nearly succeeded. We learned that S.1155 was on Senate majority leader Trent Lott’s private list for last-minute attachment to the massive appropriations bill for the Department of Health and Human Services.

A dozen Senators, led by Barbara Boxer (D-CA), with support from state food and drug regulators, state attorneys general and public interest groups, took up the cause. The Clinton administration agreed to take a tough stance, temporarily blocking the bill. Unfortunately, the deadlock between President Clinton and Congress has forced a lame-duck session, where this legislative mischief is likely to be tried again.

“Sadly, lame-duck sessions tend to be special-interest feed fests,” says our attorney David Roe. “We’ll have to stay tuned and spring-loaded, right up to the final gavel.”

More on the web. For the complete Seafood Solutions guide and additional information on fisheries and aquaculture, visit www.environmentaldefense.org/more/10533.
A holiday greeting from Fred Krupp

As we usher in the New Year, I want to thank you for your support in the year 2000. Never before have our members and friends been so generous, and it has made a big difference in what we’ve been able to accomplish for the environment.

Our 2000 Annual Report is just off the press, with behind-the-scenes stories of achievements in biodiversity, climate, health and oceans. I hope you’ll request your free copy (just mark the form inside this issue or see the report online at www.environmentaldefense.org/more/10534). As you look over our results this year, I hope you’ll give yourself part of the credit—because it’s been your caring and generosity that have made this work possible.

I’m pleased to report that 81 cents of every dollar we spent this year went directly to our program activities. In the year ahead, we’ll once again devote ourselves to these programs. With your help, we look forward to more victories. Thank you for your continued support!

—Fred Krupp, Executive Director

An alliance to save woodpeckers

Combing the pine forests of Southern Virginia, Environmental Defense economist Robert Bonnie recently participated in a census of the red-cockaded woodpecker, one of America’s rarest birds. Only about 20 of the eight-inch-long birds remain in the state, most clustered around The Nature Conservancy’s Piney Grove preserve.

Bonnie knew the survival of the species in Virginia depends on conserving privately owned forests surrounding Piney Grove. So we teamed up with The Nature Conservancy to approach neighboring landowners to participate in a Safe Harbor program. Safe Harbor was pioneered by us and later adopted by the U.S. Fish and Wildlife Service.

“Safe Harbor is a powerful conservation tool,” noted Michael Lipford, director of The Nature Conservancy in Virginia. “Private landowners who agree to protect endangered species can do so without fear of government regulation.” To extend the birds’ habitat, we helped the Conservancy reach a Safe Harbor agreement with International Paper. The company will harvest timber less frequently on neighboring land to preserve older trees the birds need. The Conservancy will administer the project.

Other Safe Harbor programs for red-cockaded woodpeckers, modeled on our plan, are already in place in North and South Carolina and Texas. As the Safe Harbor concept spreads, a growing number of conservation organizations are developing and administering these programs.

“Environmental Defense really helped make this critical conservation project happen,” says The Nature Conservancy’s Michael Lipford.

How donations were used

PROGRAM SERVICES 81%

Management, administration and fundraising 19%