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Finding the ways that work

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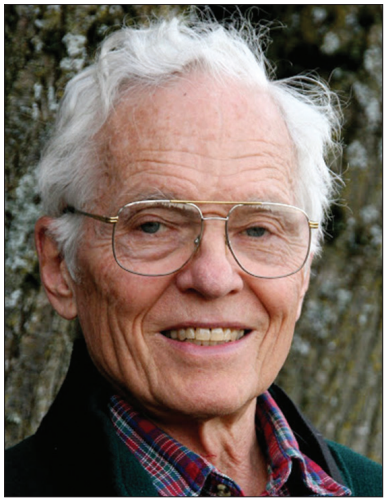
Prepared for EDF Members

DDT wars and the birth of EDF

AN INTERVIEW WITH FOUNDING TRUSTEE CHARLES WURSTER


Founding trustee Charles Wurster

This story begins with Rachel Carson and her 1962 book, *Silent Spring*. Birds were dying. Populations of the bald eagle, brown pelicans and peregrine hawks were in sharp decline. Predatory birds were laying eggs with shells so thin that they broke when the mother sat on them. Songbirds were going into convulsions and dropping dead. Carson argued convincingly that the toxic pesticide DDT was having a devastating effect on the environment. And, since World War II, it had been sprayed indiscriminately around the world.

A scrappy group of scientists and a lawyer sitting around a table on Long Island in 1965 decided to change that. All avid birders, they had watched the osprey population collapse. And from their living rooms after work, they launched a long battle to win a federal ban on DDT in 1972. Their novel idea was to marry science to the law—and challenge some of the most powerful industries in the nation in court, using impeccable scientific evidence to make their case.

This had never been done before. More than once they were thrown out of court. But in the end, their strategy worked—and they changed the environmental movement in this country by helping establish the right of ordinary citizens to sue their government to protect human health and the environment.

That bold group of ten became Environmental Defense Fund—and their story is told by Charles Wurster, one of the EDF founders, in a new book: *DDT Wars: Rescuing Our National Bird, Preventing Cancer, and Creating the Environmental Defense Fund* (Oxford).

Charlie Wurster, now 84, was an assistant professor of biological sciences at State University of New York in Stony Brook when he and the others gathered in a borrowed

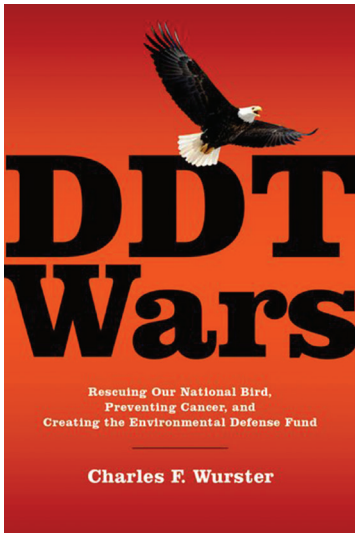
conference room to sign the Certificate of Incorporation of the Environmental Defense Fund in 1967. Charlie and Art Cooley, another founding scientist, have served as EDF trustees ever since—nearly 50 years.

In the preface to his new book, Charlie includes a quote from Margaret Mead: "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that has." Here is the story of the citizens who founded EDF.

Charlie, how did you know that DDT was a serious threat?

My first contact with DDT was in 1963 in Hanover, New Hampshire. I was in my lab at Dartmouth College when a student brought in a robin that was twitching and convulsing. At the time, Hanover was spraying DDT on trees, attempting to control Dutch elm disease.

DDT is a nerve poison that causes birds' nerves to fire uncontrollably. It contaminates the food chain and is lethal to songbirds who feed on contaminated earthworms, especially robins. What got to me was that DDT was killing birds—yet it was ineffective at controlling Dutch elm disease.



The town fathers insisted they were doing a responsible job and that DDT doesn't kill birds. We were suspicious, so four of us did a simple study. We proved conclusively that a lot of birds were dying from DDT—and published the study in the journal *Science*. Hanover officials agreed to stop spraying DDT. We had spent two years stopping DDT in one town, but hundreds of towns were still using it.

When I moved to Long Island in 1965, I was invited to join a small group of scientists who met once a month in someone's living room to discuss all kinds of environmental problems. Local authorities were spraying DDT on the coastal marshes to control mosquitoes and the scientists were concerned about the impact it was having on ospreys that were feeding on fish in DDT-contaminated marshes. Their populations had declined precipitously on Long Island and in Connecticut and New Jersey. They were not reproducing. They were laying eggs that broke in the nest, so no chicks were produced. Populations were collapsing by 80% to 90%.

By that time, I had read Rachel Carson's *Silent Spring* and some of the scientific literature on DDT, so at one of our monthly meetings, I was given the assignment of writing to the editor of a local newspaper about the spraying of DDT on salt marshes.

The night the letter appeared, I got a call from a lawyer named Victor Yannacone. He said, "I have a lawsuit going against the Suffolk County Mosquito Control Commission for causing a fish kill in Yaphank Lake. Do you know some scientists who might want to testify on that?"

Photo courtesy of National Archives and Records Administration.

A specially equipped plane sprays DDT on a test site in 1947.

The next night, we met Vic Yannacone in Art Cooley's living room. "If you scientists know what you're talking about, I need your help," Vic said. "Sue the bastards" was his battle cry. So we got busy gathering scientific reprints, running copy machines and writing affidavits. We didn't know much about writing affidavits, but we pulled everything together and Vic marched off to New York State Supreme Court in Riverhead and filed a lawsuit.

Was using the law to protect the environment a radical idea back then?

Yes, filing a lawsuit was just this side of bomb throwing. You didn't do that in polite circles, but we did it anyway.

What happened?

A few weeks later, the judge issued a temporary injunction stopping the mosquito control commission from using DDT. That really impressed us. People had been trying to get the commissioner to stop using DDT on Long Island for ten years. They wrote letters to editors and pestered their congressman, but nothing ever happened. But in just a few weeks, a lawyer with a typewriter and some scientists had stopped the mosquito control commission.

At the injunction hearing, many scientists testified that DDT causes damage, not only to birds but in a general way to ecosystems. The commission didn't even have a biologist to counter all this. They were defenseless. The judge kept the temporary injunction in place for a year.

We began to think that marrying science and law to defend the environment in court was a good strategy. Courts had not been used for environmental protection before. So in 1967, ten of us gathered in a conference room at Brookhaven National Laboratory to sign the papers to incorporate as Environmental Defense Fund. There was no organization, office, staff, members or bylaws. At some point, people started sending money and we didn't know how to keep books.

Where it all started: EDF's first office (1970) was behind the great eagle at the post office in Stony Brook, New York.

We opened our first office above the Stony Brook Post Office on Long Island, with a staff of three. We had no idea where all this would lead. It was like dropping a pebble into a pond: you get a little wave and then another, and they make circles and they spread over the whole pond.

In the end, the lawsuit against the Suffolk County Mosquito Commission on Long Island was thrown out of court.

Yes, but we won while losing. DDT was never sprayed on Long Island again. We won the case in newspapers and in 1971, the New York State Legislature banned DDT. We got much of what we were after while losing.

The judge threw the case out because he said we didn't have "standing" to sue the government and we didn't have a financial stake in the outcome. In the beginning, we were fighting to protect birds. Birds had no standing in court, so we could not represent them since we were not birds. But we achieved what we set out to do and realized that filing lawsuits could be a powerful tool.

The early lawsuits helped established the right of ordinary citizens to sue the government to protect human health and the environment.

Vic argued that people had a constitutional right to an uncontaminated environment. But there were huge barriers. We had no standing in court to represent the environment or wildlife without a financial reason to do so. Jurisdiction, or which court to choose to

pursue a lawsuit, was another problem. There was also sovereign immunity, which said that citizens couldn't sue the government.

Everything our lawyer said seemed logical, but future judges were less impressed. We kept getting kicked out of court until we got to the U.S. Court of Appeals in Washington, DC, the second-highest court in the land, and in 1970, the judges finally let us in. The ruling became a foundation for the creation of environmental law in this country. It also set the stage for the U.S. Environmental Protection Agency to ban DDT nationwide.

Over the years, the scientific bases for the ban became more compelling.

As early as 1967, we suspected that DDT was interfering with calcium metabolism and was causing the eggs to break. Then came an article in *Nature* by a scientist in England who had gone through museum collections of eggshells of peregrine falcons, which were declining in North America and Europe. He plotted the eggshell thickness of peregrines from 1900 to 1967. It was constant up until 1947 and suddenly, the peregrines were laying eggs that were 18% thinner than before. By coincidence, the worldwide introduction of DDT was in 1946. That didn't prove that DDT was the cause, but it sure looked suspicious.

Many people were working on DDT. The Patuxent Wildlife Research Center in Maryland was raising a colony of kestrels, a small falcon related to peregrines. One group of kestrels was fed the same amount of DDT that was present in the environment while the control group got clean food. In one generation those kestrels receiving DDT were laying eggs with shells that were 15% thinner than the controls.

These experiments proved the direct cause-and-effect relationship with DDT. They pinned the tail on the donkey.

After the widespread use of DDT got under way in 1947, osprey populations collapsed on Long Island and in Connecticut and New Jersey.

Getting to the federal ban on DDT took EDF's founders more than five years. What kept you and the others going?

EDF was born of the frustrations of ten people who were tired of writing letters to congressmen and getting nowhere. Some apologists for the pesticide industry crucified Rachel Carson and passed her off as a quack. They thought we were a bunch of nuts, so we had a strong urge to fight back and win. The further we got into it, the higher the stakes became.

How did the fight over DDT change the environmental movement in this country?

Among other things, it helped create a body of judicial decisions that would form the foundation of environmental law. It helped knock down the legal barriers that prevented citizens from suing the government. Other organizations started using litigation as well and it gave the environmental community an effective tool.

In your book, you describe a suit brought by EDF in 1970 accusing Montrose of dumping massive quantities of DDT into the Los Angeles sewer line—eventually ending up in the Pacific Ocean. Would it be harder today for a company to get away with doing something like that?

I think it's much harder to do that kind of gross performance. On the other hand, burning coal is somewhat similar and leads to human deaths. Thousands of people die prematurely each year from air pollution caused by coal. The greatest of all the problems is climate change. Stopping coal pollution is a lot harder than stopping a single company like Montrose.

How did EDF's tagline evolve from "sue the bastards" to "finding the ways that work"?

By 1973, we realized that creating economic incentives was important. Scientists and lawyers didn't know how to make those arguments, so we began to hire economists who did.

We started working with McDonald's. They had been creating a huge amount of non-recyclable trash, and by working together we found ways to eliminate much of it. McDonald's stopped using styrofoam clamshells and started using paper-based boxes and wraps instead—and they sold just as many hamburgers.

In some cases, it proved easier to change a company than to change government rules. EDF is working with Walmart to get harmful chemicals out of their products and they have made great progress. Not all corporate structures are the enemy.

It started with a rag-tag group of scientists meeting after work on Long Island. Did you have any idea what you were starting?

We achieved our initial goal. DDT was banned in 1972, but that was not the end of the story. The waves kept spreading. They kept getting bigger. Ten of us signed a certificate to start EDF, but that was only the beginning of an ever-growing team. It was a great team and still is. Without that, little would have happened.

EDF founding trustee Dennis Puleston examining an osprey nest. Between 1948 and 1966, he watched chick populations plunge from hundreds each year to just four.

To me, it's an almost unbelievable story of remarkable growth. Incredibly dedicated smart, innovative, wonderful people—great people—kept arriving. There seemed to be an almost endless supply of new ones, and they just kept coming. EDF attracts them because EDF is effective. We insist on scientific credibility, but we also have economists working on market solutions, policy people working in Congress and state legislatures, lawyers using the law to protect the environment. We get people to write letters and turn out for hearings and lots of other things.

EDF is tremendously enthusiastic and optimistic. It's doing things. I feel better about the future every time I come away from an EDF board meeting.

Are you optimistic that EDF can successfully confront climate change?

Yes, but I am under no illusions that it will be easy. It is the toughest battle EDF has ever confronted. There's a tendency to compare the DDT story to climate change. That's like comparing a mouse with an elephant or a termite with a whale.

But the underlying fundamentals to confronting climate change are not really that different from when we worked on DDT: A fearless group of dedicated, smart and innovative people who are not afraid to try every tool at their disposal and leverage every relationship they have to make progress. The battle over climate change is going

Three EDF Founders, Art Cooley, Charlie Wurster, and Dennis Puleston, in 1987, commemorating the 20th anniversary of the founding of EDF and the 21st anniversary of the first trial against DDT in the New York State Supreme Court in Riverhead, Long Island in November 1966.

to go on for a long time. It is a grueling marathon race. But EDF and the world can win if we all stay committed to fight it with everything we've got. We all must refuse to quit.

How important was the DDT battle to your life?

It became the central feature of my life, which is one of the reasons I wanted to write *DDT Wars*. It is an optimistic book. The front cover has a bald eagle flying away from the DDT Wars.

After the ban, the suppressed birds came back with flying colors. The peregrines and bald eagles recovered dramatically to former levels and were taken off the endangered species list. The cooper's hawks and ospreys also staged spectacular recoveries. People put up nesting platforms for ospreys in parking lots full of people and cars and the ospreys raised their families in the midst of all those people. The brown pelicans also came back after being nearly gone from Southern California and the southeastern U.S. The bird recoveries 20 or 30 years down the road were spectacular. It's a wonderful story. It was my amazingly good fortune to have been there at the right time and place to become part of the story.

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