

# Charles Wurster, scientist who battled to ban pesticide DDT, dies at 92

He co-founded the Environmental Defense Fund, one of America's premier environmental groups

By [Dan Diamond](#)



*Charles Wurster with daughter Nina in 1976.  
(Marion Homire)*

Charles Wurster, a scientist whose battle to ban pesticides helped save the bald eagle and other endangered bird species, and led to the founding of the Environmental Defense Fund, one of America's premier environmental groups, died July 6 at his daughter's home in Arlington. He was 92.

The cause was chronic obstructive pulmonary disease, said his son, Erik Wurster.

Trained in organic chemistry and working as a researcher at Hanover, N.H.-based Dartmouth College, Dr. Wurster began his second career in environmental advocacy in December 1962 with a pen stroke.

At a party, he signed a petition calling on town leaders to stop spraying the pesticide dichlorodiphenyltrichloroethane, better known as DDT, because a local conservationist alleged it was killing Hanover's birds. Town officials  
Dartmouth colleagues decided to study the spray's effects.

They counted birds found at sites slated to be

believed DDT was necessary to eliminate beetles that were plaguing the area's elm trees.

Widely adopted in the 1940s, DDT was generally seen as a miracle product — an insecticide that could wipe out malaria-carrying mosquitoes and other pests, with no obvious harms to humans and animals. It was sprayed around the world, with clouds of DDT misting farmworkers and children sitting at picnic tables, and won its inventor, Swiss chemist Paul Müller, a Nobel Prize in 1948.

When town officials shrugged off the petition, Dr. Wurster, his then-wife, and two other sprayed in Hanover in April 1963, then did the same for a control population more than a mile away — and watched what happened as the town's planned three-day DDT spray went forward.

The study captivated Dartmouth colleagues and students, who raced to tell Dr. Wurster about robins that they saw spasming in pain in the days after the DDT spray or brought the twitching birds to his laboratory.

Within several weeks, Dr. Wurster's laboratory freezer was jammed with 151 dead birds from Hanover — and only 10 dead birds from the control group across the river. Through their analysis, the researchers concluded that after days of feeding on contaminated insects, the birds accumulated lethal concentrations of DDT in their brains. They published their findings in *Science* magazine two years later.

The Washington Post

Meanwhile, Hanover's elm trees continued to suffer from a beetle-born disease. Presented with Dr. Wurster's findings, Hanover officials in 1964 agreed to replace DDT with a less dangerous

insecticide, methoxychlor — a muted achievement, Dr. Wurster felt.

“We had spent two years stopping DDT in one town, while hundreds of other towns continued to use it, a not especially spectacular performance,” he wrote in his 2015 memoir, “DDT Wars: Rescuing Our National Bird, Preventing Cancer, and Creating the Environmental Defense Fund.”

In 1965, Dr. Wurster took a new job as an assistant professor of biological sciences at the State University of New York at Stony Brook and poured his energy into fighting DDT alongside other scientists and conservationists. His anger spilled out in a letter to the editor of the Long Island Press in which he castigated the commissioner of the Suffolk County’s mosquito control board.

“It is alarming to think that the dissemination of toxic materials is in the hands of the person who thinks they are harmless,” he wrote in 1966.

Dr. Wurster’s letter caught the attention of Victor J. Yannacone Jr., a lawyer who was already suing officials over the dumping of DDT into a nearby lake. Joining forces, Dr. Wurster, Yannacone and allies in the scientific community quickly won an injunction that forced local officials to stop spraying DDT in marshes. They had accomplished in weeks what scientists’ pleas had failed to do for years.

The new strategy — a combination of lawsuits and public pressure — proved to be a turning point in the environmental movement, which had received popular support but won few policy changes after Rachel Carson’s landmark 1962 book, “Silent Spring,” elevated awareness of pesticides and other pollutants.

DDT also had ample defenders who argued that Dr. Wurster and his colleagues were alarmist. The commissioner of the Suffolk County

mosquito control board ate the pesticide in public in an attempt to demonstrate its safety.



*Environmental Defense Fund founders Art Cooley, left, Charles Wurster, and Dennis Puleston in 1987. (T. Charles Erickson/Environmental Defense Fund)*

Dr. Wurster, Yannacone and eight others formed the Environmental Defense Fund in 1967 — the same year the United States declared the bald eagle, America’s national bird, an endangered species.

The new group’s legal actions led to a high profile showdown in Wisconsin, where scientists warned regulators that DDT was imperiling the state’s ecosystem.

Dr. Wurster and colleagues testified about the risks to birds of prey such as eagles, ospreys and falcons that fed on DDT-contaminated fish and other organisms. As a result of consuming so much of the pesticide, the environmental experts said, the birds laid thin and brittle eggs that often failed to hatch, imperiling their species’ survival.

The hearing stretched for nearly six months. Wisconsin lawmakers and regulators ultimately concluded in 1970 that DDT was a pollutant and should be banned. EDF later replicated the strategy with regulators in Washington.

Dr. Wurster was a “real giant in modern environmentalism,” said Elena Conis, a historian at the University of California at Berkeley who profiled his efforts in “How to Sell a Poison,” her 2022 history of DDT. Conis said that Dr. Wurster laid the groundwork for the modern

July 25, 2023

**The Washington Post**

environmental movement by “putting health at the core” of environmentalists’ work.

## **Broadening the fight**

As EDF steadily gained attention and acclaim, its leaders broadened their fight to include warnings about the risk of human cancers, citing evidence

that DDT caused cancer in test animals. Dr. Wurster — the group’s chief scientist — served as a key spokesperson, dueling with skeptical researchers and taking his case to some of the nation’s highest-profile forums.

“A quarter-century ago, man launched a biological experiment of truly colossal proportions, inadvertently using most of the world’s animals as the experimental organisms,” Dr. Wurster wrote in a 1969 op-ed in *The Washington Post*. “It is time to end the great experiment with DDT.”

Dr. Wurster and his allies ultimately won the argument: The U.S. Environmental Protection Agency in 1972 banned most uses of DDT in the United States. Bird species threatened by the pesticide made a comeback; the peregrine

removed from the endangered list in 1999, and the bald eagle was in 2007. And EDF’s influence grew, with more than 3 million members and \$300 million in annual donations today.

“It’s mind boggling to have been there for those first meetings ... and see what it has turned into,” Dr. Wurster told the *New York Times* in 1990.

Charles Frederick Wurster Jr., the son of a stockbroker and homemaker, was born in Philadelphia on Aug. 1, 1930, and graduated from nearby Haverford College in 1952. He received a master’s degree from the University of Delaware in 1954 and a doctorate from Stanford University in 1957, both in organic chemistry.

July 25, 2023

He was a Fulbright fellow in Austria in 1957 before taking a job with Monsanto Research Corp. near Boston, where he researched jet fuels and laminating resins before joining Dartmouth in 1962.

**The Washington Post** July 25, 2023

topic,” he wrote to EDF leaders in 2017. “Deaths and human health are not as easily dismissed.”

<https://www.washingtonpost.com/obituaries/2023/07/25/charles-wurster-environmental-defense-fund-dead/>

Dr. Wurster’s marriages to geneticist Doris Sanford and Norwegian diplomat Eva Tank Nielsen ended in divorce.

Survivors include his partner Marie Gladwish of Seattle; a son from his first marriage, Steven Wurster of McCall, Idaho; two children from his second marriage, Nina Wurster of Arlington and Erik Wurster of Brookline, Mass.; and four grandchildren.

Dr. Wurster, who retired in 1995 as an assistant professor at SUNY Stony Brook, watched later efforts to revive DDT, including by corporations and libertarian organizations attempting to weaken regulations, and by some public health experts claiming the pesticide would help contain disease outbreaks.

“DDT was arguably one of the safer insect repellents ever invented — far safer than many of the pesticides that have taken its place,” Children’s Hospital of Philadelphia pediatrician Paul Offit wrote in the *Daily Beast* in 2017, arguing that DDT’s harms to humans were overstated and its ban led to the reemergence of malaria across the globe.

Conis, the historian, noted that while banning DDT was a major achievement that helped save wildlife, “it allowed us ... to think that we were getting rid of the worst actor when in fact there were loads and loads of other pesticides” that were equally toxic and remained on the market.

Dr. Wurster grew frustrated by regulatory rollbacks under the Trump administration and what he saw as the discrediting of environmental scientists, and he suggested that EDF reframe its agenda by focusing on the harms of air pollution.

“The term ‘climate change’ has become so political that many people simply tune out that