

N THE 1960S, CNRA, the Environmental Defense Fund (EDF) and Lorrie Otto were traveling separate but similar paths in their efforts to stop the use of DDT to control mosquitoes, Dutch elm disease and other pests.

As early as 1951, CNRA held a conference on the dangers of chemical sprays. Activities escalated in the sixties as CNRA members circulated anti-spray petitions, held a second pesticide conference, and published scientific data on the negative environmental effects of chemicals. Meanwhile, EDF, founded in 1967 by a small group of scientists from New York, was suing individual communities in Michigan to halt DDT spraying. EDF was having some success because no community could find experts to appear in court to refute their arguments. At the same time, Lorrie Otto from the Milwaukee area, reacting to birds dying in her neighborhood, pleaded to no avail with her village board to stop spraying DDT. In frustration, she talked to whoever would listen about the dangers of pesticides, seeking out scientists to support her position.

When the three came together in 1968, an alliance was formed that led to the DDT hearings in Madison, the banning of DDT in Wisconsin, similar legislation in other states, and ultimately national legislation outlawing DDT.

That was 30 years ago. CNRA is now celebrating its 50th anniversary. EDF is one of the leading environmental litigators in the nation. Lorrie Otto has become a prominent Wisconsin environmentalist and a national figure in the natural landscaping movement.

CNRA, DDT and Me

by Lorrie Otto

WAS LONG AGO. IT WAS before I began writing in a diary, when I saw a robin quivering, shaking and flopping about on my lawn. At first, there were only a few, then more and more. Some time later I collected 28 robins and dumped them on the desk of the Bayside village manager. Some had missing heads (shrews?). During one of our daily coffee klatches, I asked my neighbors about the dying birds. They had not noticed. However, within days, two called to say, "Yes, I see them now that I'm looking. What's wrong?"

It was at this time that I jumped from the ignorant to the educated. Joe Hickey, the world-famous ornithologist, was on the board of the Wisconsin chapter of The Nature Conservancy with me when he told me his story. He was attending a funeral in Illinois, gazing past his friend's casket through a window and into a tree. The tree was laden with mulberries but no birds. "You never see a mulberry tree without robins," he said. "I became so alarmed that I forgot my grief as I searched the property for birds. NONE!"

We were in his office when he opened a desk drawer and presented me with research papers prepared by some of his graduate students. One was on the effects of DDT stored in the earthworms in the lawns of Shorewood. Another was on the thickness of eggshells in museum collections from Florida to Wisconsin, thinning as DDT spraying spread north. Of 62 eagle nests around Lake Michigan, only three were left, and their eggs were too fragile for incubation. Some didn't have shells at all. Then Hickey advised me to write to Dr. Charles Wurster in Long Island, N.Y. who was associated with the Environmental Defense Fund (EDF). "He probably knows more about DDT than any person on this planet," he said.

Armed, literally, with so much early research, I appeared at my Bayside Village Hall. They had been spraying DDT for mosquito control or squirting it up into elm trees along the streets while encouraging private property owners to do likewise for elm beetles. The only recollection I have of that evening is of a man slamming his fist on the table and shouting, "Young lady, keep your mouth shut or this will reverberate all the way to the halls of Congress." He was right. A short time later Senator Gaylord Nelson quoted me, a quote from the *Milwaukee Journal*, which in turn was quoted back in the *Journal*.

Other people's words were in the paper as well. George Hafstad, a pathologist with the Agriculture Department, cited a study in which prisoners were fed small amounts of DDT daily for 18 months without ill effects. Charles Koval, entomologist with the University of Wisconsin Extension, said that DDT wasn't nearly as bad as the chlordane we

were sprinkling on our lawns. There was a ring of truth to that. While planting bulbs one autumn day, I accidentally shook some powder on an angleworm. That poor creature twisted, twirled and writhed. Never again! Those were fuzzy, unhappy, helpless days in my life.

Helicopter spraying was the next heinous tool

What do you want,

Mrs. Otto? Birds or trees?

Bayside Village Manager

used. The men who did the spraying insisted birds were not harmed. "Birds see the plane coming and fly away," they said. Notices appeared in our mailboxes suggesting that we cover the birdbaths and put our cars in a sheltered place. Our village manager asked: "What do you want, Mrs. Otto? Birds or trees?"

On April 14, 1965, at 6:30 a.m., my husband yelled, "Helicopter!" I jumped out of bed, ran down the hall, into the attic, out of the dormer window, climbed the roof to the ridgepole, stood up and shook my fist at the pilot as he flew by. Better than me in my pink nightie, though, was a man in River Hills, Joe Uihlein. When the helicopter flew over his estate, he shot at it!

ne gray day, Hickey gave me an ink-wet report on DDT in Lake Michigan (*Chubs to Gulls*). I went from his office to the Shade Tree Conference, where the Agriculture Department continued to recommend the use of DDT on elm trees. When the meeting adjourned and I was lifting my coat from a hanger in the hall, I noticed the nametag on the man next to me said DNR. I looked directly at him and asked, "How could they continue to use DDT after the recent fish report?"

Surprised, he responded, "How do you know about that report?" Then he told me every lake and river in our state contains DDT. At the time I

didn't know about other lakes and rivers. I only knew about our 22,400-square-mile Lake Michigan.

"Keep quiet about this; it will destroy our tourist industry. Do you realize how many fishing licenses we sell?" he asked.

"Are you afraid the fishermen will play musical

chairs and rush to another state to fish?"

"Other states are just as bad as we are," he responded.

"How can you keep this a secret?" I asked, astounded.

responded. "How can you keep

"It won't be a secret for long. All the states around the lake are going to reveal it at the same time."

I returned to Milwaukee and went directly to the Village Board meeting, where, at my request, we met in secret session (no reporters). I told them everything I had heard. Then I drove to the offices of the morning paper, the *Milwaukee Sentinel*, and went to Don Johnson's office to ask him how much he knew. He begged me not to mention this for at least another 24 hours. "This is my story," he said. "I've been working hard on it. It took a long time to pry the DNR apart from Ag."

The next morning, the *Sentinel* had the entire updated story from robins to mink to fish to worms, etc. It was a fabulous expose. I must have felt the way Rachel Carson did when her *Silent Spring* was reprinted in the *New Yorker* magazine.

At last—a big audience! I thought things would change now; we would take another fork in the road. But no. A Bayside Village Board member phoned me and said, "Mrs. Otto, we don't care about fish and birds. If you can't prove that DDT

harms human health, then we're going to spray." The village manager also was unwavering. He said, "Everyone is doing it. It won't make a bit of difference if just Bayside stops. Besides, it's so cheap."

A neighbor said that she didn't like the idea of spraying, but she was married to a businessman, and it would reduce their property values if all of the trees died.

One early summer day, my little son George came running into the house exclaiming, "Mommy, Mommy! The wrens are doing what the robins are doing!" More quivering. A summer day, with no wren singing. A summer shower with no robin song. And Dr. Charles Wurster was telling me about the warblers that his students had collected on the Stony Brook campus. When the man who sprayed returned the following year, Charlie showed him the freezer full of those tiny birds. Wurster said the man felt so awful that he stopped spraying and never returned.

alter Scott asked me to do a survey of DDT use in all the municipalities in Milwaukee Country. The requests from the DNR were being ignored, so I phoned or visited all 17 of them to find the answers to such questions as "How much DDT? How often? What strength? What vehicle for delivery?" St. Francis did not spray at all. River Hills used methoxychlor because the "garden club ladies" had heard a lecture by Joe Hickey and would not let their men spray with DDT. My village of Bayside and Fox Point used more DDT than any others. The latter even threw pellets or tablets of DDT into drainage ditches for mosquito control.

Again, Scott phoned. "Art Hassler is ready to roll up his sleeves and fight DDT spraying in Madison because his bass in Lake Mendota have too much of that chemical in their fat."

A newspaper headline shouted, "Commercial Canning Company in Michigan Can't Can Salmon Because of Too Much DDT."

A teenage boy crashed onto our property. The boy's father greeted me: "Aren't you the woman who has done so much to keep DDT out of our ravines. I bought a factory north of here to make protein food out of alewives, but can't sell it to people because of too much DDT. And a mink farmer has launched a lawsuit because all of his mink have miscarried."

I remember in March 1967, I asked the *Journal* to publish a photograph of a robin in its death throes. They refused, saying the cranberry scare and the botulism scare were enough. They didn't want to scare people with DDT. Then, in 1968, both the *Sentinel* and the *Journal* wrote editorials opposing the use of DDT.

For some time, the Ag Department had had an advisory committee to help them take responsibility for their recommendations. It was composed of 17 members representing the canning industries, the tourists' interests, the orchard people, the municipalities, the parks and recreation departments, the health officials,

Pesticides in the News

CNRA members and other citizens of villages surrounding Milwaukee have been vigorously protesting the use of DDT for prevention of Dutch elm disease—for some. this marks almost ten years of annual protest. As a result, several of the village boards changed their minds and voted to use methoxychlor, which is less toxic and less accumulative.

> The CNRA Report March. 1966

nurseries and lawn-care men—all segments of our society who wanted to spray with DDT.

On August 1, 1968, I read in the local *Herald* that Fox Point and Bayside were going to spray their elms in October and November. I phone Joe Hickey. He said that the Advisory Council met on Monday, where only he and the man from the DNR voted against the use of DDT. There was no ecological conscience on the part of any of the rest of the members. Both Joe and I reacted immediately. We decided we had to do all we could to get the Environmental Defense Fund here. Joe phoned Wurster. We met at EDF headquarters in Long Island the weekend of August 24-25, 1968. Charlie's greeting to us was: "We have all the marbles. We just need to roll them out in front of a judge."

hat weekend was probably the most glorious of any in my life. In my memory, I see three Norwegians walking the beach on Long Island. Their ages spanned 30 years. Charlie Wurster was only 40. I was 50 and Joe Hickey was 60 years old. As we walked, the two men called out the amounts of DDT in the breasts of the birds flying over our heads, swimming in the ocean or running in the sand ahead of us.

That enchanting afternoon ended, however, as I was boarding the little six-seater plane to fly back to the New York airport. Charlie said, "We need a lawyer to admit EDF's attorney, Vic Yannacone, into the Wisconsin system and \$15,000 to pay airfare for EDF board members and witnesses." My face fell so quickly it must have distressed Charlie, but he brushed it off with a wave of his hand and said, "Go to your group?" *GROUP*? I didn't have a group, unless it would be the PTA Art Committee, whose husbands in Bayside undoubtedly sprayed with DDT!

My husband and I had no money. He was trying to preserve a financially shaky psychiatric

Voices from the Past Roy O. Gromme

RE YOU ABOUT TO BECOME POISONED without your consent? This is the feeling many of us have at this time of year, in spite of the hollow-sounding assurances that the poisons about to engulf us and our properties are well below our tolerance levels and those of the "desirable" remnants of the natural environment we hope to keep around us. That the majority of our neighbors by silence or vocal consent, through prejudice or ignorance, continually choose to open a Pandora's box for us seems unjust at the least.

The evidence against DDT seems as strong as that against the use of tobacco. The difference in effect is I abstain from tobacco by personal choice. I'm not allowed to make that same choice regarding DDT.

President's Message, February 26, 1967

hospital but suggested that I call upon "birders" such as Mrs. Nelson in Oconomowoc. She cheered me with a check for \$600, and sent me on to the Milwaukee Audubon Society's board meeting. I recall the big fire before which a cluster of cigar smokers were sitting. As I presented my story, they stared up at me as if I were an angel from heaven and kept murmuring that this was all too good to be true. They gave me \$800.

Then I called the local Izaak Walton League. Miriam Dahl replied that they had no money but they had a lawyer to help. Bless her! My two lawyer friends had refused because they had clients in the firm who were polluters of Lake Michigan.

I visited with the president of the local Sierra Club in his new home and left a stack of printed materials on DDT. He never called back. It was months before someone reported to me that he had died of brain cancer.

Thinking of the fish report, I phoned a large fish company nearby. They were distraught because

they didn't want their customers to know what a load of DDT was in the fish they were eating! The owner said fishermen were very poor and he could only give me \$15.

Then I called a honey farm because, of course, they would be concerned about the bees. Yes, but they also were "very poor" and could only give me \$10.

It was then that my daughter Tricia came home from school and said, "Why don't you call my biology teacher, Mr. Gromme?" He was the science teacher at Nicolet High School who took his classes to Hamerstrom's each spring to watch the prairie chickens boom at dawn. I went directly to the phone. He asked me where we lived and said he'd be right over. At that time Roy Gromme was the retiring president of CNRA. Today, over 30 years later, I still get choked up when I repeat what he said: "We will give you everything we have: all our money and mailing addresses of our members. We'll open our homes in Madison to house the witnesses as they come to town. If this



CNRA president Roy O. Gromme greeting Senator Gaylord Nelson. At the time, Gromme was retiring CNRA president and Senator Nelson was our first witness at the DDT hearings.

destroys CNRA, we will have died for a good cause."

The first thing Roy Gromme did was to convince his father, Owen, then curator of the Milwaukee Museum, to convene a meeting at the Milwaukee Public Museum to hear Dr. Wurster tell them about DDT and EDF. I expected an auditorium full of people, but there were only six

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— Roy O.Gromme

around a table. Among them was Freddie Ott, who would collect almost \$100,000 from his friends, and be the person who would deliver the CNRA petition to the DNR on October 18, 1968.

That petition requested a declaratory ruling on whether DDT was "an environmental pollutant contaminating and rendering unclean and impure the air, land and waters of the state, making the same injurious to public health and deleterious to fish, bird and animal life." The hearing opened in the State Capitol Building on December 2, 1968.

Lorrie Otto, recipient of numerous state and national environmental awards, founder of the Wild Ones, and a recent inductee to the Wisconsin Conservation Hall of Fame, was CNRA president from 1985 to 1987 and is currently a CNRA councilor.

CNRA and DDT — The Background

OY GROMME HAD THE FULL backing of CNRA in 1968 when he answered Lorrie Otto's call to help fund EDF's entrance into the DDT fight in Wisconsin. CNRA had been opposing chemical sprays since its beginnings. The topic of CNRA's first conference was "Chemical Sprays." A second conference in 1958 was followed by publication of a special report on pesticides.

Activities intensified in the 1960s. A Sauk County petition drive initiated by CNRA in 1964 against chemical spraying of roadsides was the first citizen-organized effort in Wisconsin to stop chemical contamination of the environment. Soon after, in April 1966, CNRA and the UW-Madison Botany Department held The Citizens Conference on Pesticides in Madison. At that conference Dr. Joseph Hickey, Professor of Wildlife Biology, UW-Madison, one of five speakers, presented findings from his research on the detrimental effects of insecticides on songbirds and aquatic systems the same findings that ultimately steered Lorrie Otto to CNRA. CNRA published the conference proceedings in a special report. Later that year CNRA put its full weight behind legislation introduced by Senator Gaylord Nelson to ban use of DDT nationwide.

Two years later, in September 1968, the CNRA Council filed a petition with the DNR requesting a hearing as soon as a Wisconsin city declared its intention to use DDT to

control Dutch elm disease. Six CNRA officers and members signed the petition, accompanied by supporting petitions signed by about 1,000 people throughout the state. In response to this petition, a hearing was held on October 18 to prevent the use of DDT by the City of Milwaukee.

That complaint was dismissed on legal technicalities, but not without two indirect victories. The City of Milwaukee and Buckley Tree Service, respondents to the complaint, said that neither party had any intention of spraying DDT for Dutch elm disease that season. On that date, also, CNRA filed its petition requesting that the DNR issue a declaratory ruling with respect to the use of DDT in the State of Wisconsin, laying the groundwork for a new and much broader hearing on the use of DDT anywhere in the Wisconsin ecosystem.

The Wisconsin Division of the Izaak Walton League filed a similar petition on November 1. A year later, at its National Convention in Cincinnati, Carla Kruse, representing CNRA, received the Izaak Walton League's highest award in recognition of CNRA's collaboration with the state division on the DDT issue. The irony of that award was not lost on CNRA's old-timers. Twenty years earlier, at CNRA's organizational meeting, members of the Isaak Walton League had lobbied extensively against the need to create a new conservation organization in the state of Wisconsin.

On to the Dairy State

by Charles F. Wurster

HILE ACTIVITIES WERE STILL underway in Michigan, a telephone call from Lorrie Otto, an environmentalist in Milwaukee, Wisconsin, offered new opportunities for EDF. Ms. Otto explained that DDT was to be used for attempted Dutch elm disease control in Milwaukee, and she wanted EDF to come to Wisconsin and stop it.

Investigation revealed intriguing aspects to the Wisconsin invitation. Wisconsin has a water pollution law that provides for a hearing to determine whether a substance under challenge meets the definition of a pollutant of the waters of the state. If declared a water pollutant, the substance under challenge can be barred from further use within Wisconsin. If EDF were to file a legal petition challenging DDT as a water pollutant, the Wisconsin Department of Natural Resources would hold the hearing and make the decision. An important consideration was that no court standing issue was involved. The hearing would take place before a state agency, not a court, with no legal challenges on standing or jurisdiction. Here was an opportunity for EDF to present the full case against DDT.

Other considerations were also favorable. The use of DDT leads to contamination of meat, eggs, milk and other dairy products, and the dairy industry is large and important in Wisconsin. Agriculture was therefore split in that state, one segment wanting to use DDT on crops and trees, while the dairy industry wished to avoid DDT contamination of their products. Agriculture would not present a unified force on behalf of DDT, as it would in most states.

The environmental movement was unusually strong in Wisconsin and Lorrie Otto pledged to EDF the statewide support of the Citizens Natural Resources Association (CNRA). CNRA would raise money and provide all necessary additional logistic support that might be necessary during the hearing. If EDF was going to make a difference on the national scene, this invitation could not be refused.

arly in 1968 EDF filed the petition on behalf of itself and CNRA, asserting that DDT was a pollutant of the waters of the State of Wisconsin. With great fanfare and publicity the hearing began on December 2, 1968, under the Dome of the State Capitol Building in Madison before Maurice Van Sustern, Hearing Examiner for the Wisconsin Department of Natural Resources. Senator Gaylord Nelson, the senior U.S. Senator from Wisconsin and a well-known environmentalist, was EDF's first witness. Senator Nelson had opposed the use of DDT for years and was a logical national figure to lend stature, importance and publicity to the hearing that followed.

Vic Yannacone (EDF's attorney) stunned us all by calling Louis McLean, opposing attorney representing the DDT industry, as EDF's second witness. It was one of Vic's stunts to rattle or make a particular point concerning his opposition. In this case, McLean, who worked for the Velsicol Chemical Corporation, maker of several environmentally destructive pesticides and a major polluter of the Ohio and Mississippi Rivers, had authored many inflammatory pro-pesticide, antienvironmentalist articles over the years. In one paper he had stated that environmentalists were frustrated sex perverts, food faddists, and holders of other deviant views. He regarded concerns about pesticides a public relations problem. Vic wanted that in the

record. McLean was an extremely uncomfortable witness; he never regained his composure during the hearing and was finally relieved of his duties by the industry when their position was almost too hopeless to salvage.

WITNESSES BY THE DOZEN

The strategy of EDF in presenting witnesses was that environmental problems, including the DDT problem, are inherently inter-disciplinary, and that experts in each discipline should testify within their own areas of expertise. It was like building a wall, one brick at a time. We sought to characterize DDT proponents as limited, narrow specialists unable to grasp the total environmental picture.

We sought witnesses who were top experts in their fields. They came from many parts of the United States, especially California, plus Canada and Sweden. They were invited by telephone and told that we could pay all travel and other expenses, but that there would be no fee. We were gratified to find that essentially all scientists who were invited to testify accepted the invitation. One scientist, Goran Lofroth of Stockholm, Sweden, was on an airplane for Madison within 12 hours of receiving a phone call from someone he had never heard from before.

Detailed descriptions of the substance of the hearing and the many witnesses have been published elsewhere. General areas of testimony included a description of the properties and environmental behavior of DDT, descriptions of the ecosystems in which DDT had been used in Wisconsin, mortality and reproductive effects in birds and fish, the frequent failure of DDT in insect control, and effective alternative insect control strategies (integrated control) employing reduced amounts of pesticides and no DDT.

The hearing lasted about six months, which included several lengthy recesses. EDF presented about 25 witnesses. Van Sustern was an evenhanded, impartial, and highly competent hearing examiner

FRED OTT — The DDT Hearings

The DDT hearings cost plenty, mostly travel expenses for scientists and lawyers. We had \$200, a typewriter and a list of names. Sent out letters, people sent back money. But not enough. We kept it in an envelope at first; paid out cash when the expenses came in. We were out scratching for money from anyone and everyone. I even went to a floating crap game and broke the damn pot: came out with \$1200-\$1500. Told everyone I was doing it for your feathered and furry friends.

We used the slogan on the Milwaukee Journal's masthead "If you can't find the truth, how can you make a judgment." We'd say we were trying to find the truth about DDT and it's going to take a little money. I always thought I should ask for more. Everyone wanted a tax deduction so we funneled the money through the Rachel Carson fund of the National Audubon Society. We ended up with \$100.000.

The hearings were impressive. The first hearing was in the dome of the state capitol. Here we were, sitting in tobacco-stained chairs people had been sitting in since the Civil War. Looking up at the eagle and "Old Abe." Governor Lucey was the opening speaker. Some things stick in my mind. Like the time Charlie Wurster had a go-around with a fellow from California who used to eat a teaspoon of DDT on his cereal every morning. The guy probably still looks 40!

After the hearings we wanted to go national: CNRA of Minnesota, CNRA of Illinois, and so on.

who clearly comprehended the sometimes complex scientific testimony. The Attorney General for the State of Wisconsin, Robert McConnell, had intervened on behalf of EDF; this improved our political position and aided with witness expenses, since some witnesses were presented as those of the Attorney General.



Walter E. Scott of the DNR weighing hearing testimony amounting to almost 40 pounds and 4499 pages.

Late in the hearing the DDT industry realized that the proceedings in Wisconsin were more than a public relations problems, and that things were not going their way. They replaced Louis McLean with a leading attorney from Madison, Willard Stafford, but there was little he could do to salvage their case. Cross-examination of EDF witnesses was generally ineffective. The industry presented a number of its own witnesses, but most were either unable to refute EDF testimony, or in some cases were actually supportive of it. The hearing received extensive media coverage, both within Wisconsin and nationwide. On several occasions it was covered by Walter Cronkite on the

CBS evening news. DDT was viewed as on trial for its life, even though only Wisconsin was involved. Several months after the hearing ended Van Sustern rendered his opinion: DDT was a pollutant of the waters of the State of Wisconsin. Once released into the natural environment, DDT was an inherently uncontrollable substance. DDT had been banned in Wisconsin.

he Citizens Natural Resources Association was remarkably effective in supporting EDF and the hearing in many ways. All EDF personnel and witnesses were accommodated in private homes within Madison. We had excellent contacts with scientists, lawyers and economists within the University of Wisconsin. Typing pools, Xerox machines, library facilities, messenger and many other services were made available to us. Behind the scenes a CNRA member, Fred Ott, of Milwaukee, conducted a successful fundraising operation to support the mounting expense of the hearing. Without the spectacular, entirely voluntary support of so many people in Wisconsin, one can only speculate about what would have been the future of the DDT issue, and of EDF and the development of environmental law itself.

Excerpt from "The Last Word", in Acorn Days, by Marion Lane Rogers, Environmental Defense Fund, 1990, pp. 182-85. Charles F. Wurster is professor emeritus from the State University of New York at Stony Brook and one of the founders of the Environmental Defense Fund.

HE MADISON DDT HEARINGS INVOLVED 27 days of testimony from 32 witnesses, filled nearly 4500 pages of transcripts, included 208 exhibits and adjourned on 21 May 1969, nearly six months after they had begun. Among the leading witnesses were CNRA members Hugh Iltis, Joe Hickey, and Orie Loucks, professors from UW-Madison. The hearings led to a ban on DDT in Wisconsin, similar legislation in other states and eventually national legislation outlawing DDT.

The importance of the DDT hearings cannot be understated. The hearings represented two significant firsts. For the first time Wisconsin citizens used a law unique to Wisconsin: allowing them to petition for a declaratory ruling on matters relating to pollution. For the first time, also, pesticides were coming under the scrutiny of the environmental scientific community. Historically, complete control of pesticides had been in the hands of agriculture. Winning on DDT gave the environmentalists a level of authority they never before had. Science and law had successfully combined to protect the environment. That combination, stronger than ever, continues to this day.