

Silent Spring Revisited

Excerpt from "Rachel Carson" by Frank Graham, Jr., EPA Journal, November/December 1978

Rachel Carson was an unlikely crusader. Born in Springdale, Pennsylvania, far from the sea with which she was later so closely identified, she spent her childhood absorbed in books and in the wild things around her home, to which her mother had lovingly introduced her. Her first inclination was toward poetry. At that stage she was a poet in search of a subject.

A subject revealed itself part way through her undergraduate work at the Pennsylvania College for Women, when her romantic attraction to the sea coincided with a growing fascination for biology. She went on to study biology and genetics at Johns Hopkins University, where she earned her master's degree in 1932. (Her doctorates were honorary.) For a time she taught zoology at the University of Maryland and spent her summers working at the Marine Biological Laboratory in Woods Hole, Massachusetts. She became a Federal aquatic biologist in 1936.



Image Courtesy of Lear/Carson Collection, Connecticut College

It was during those Depression years that Carson, intent on making a living, unwittingly was preparing herself for the drama ahead. Immersed in her science, her imagination resonant with phrases from favorite books read and read again, Carson began composing short articles about what she knew best, the natural world. She became a contributor to a Baltimore newspaper while sharpening her skills writing official government publications. In later years she was given the title Biologist and Chief Editor in the Fish and Wildlife Service.

An article of hers in the *Atlantic Magazine* attracted the attention of several writers and editors who suggested that she write a book, and this suggestion changed the course of her life. In the 1950's something began to gnaw at her, a sense that events in the world had taken an ominous turn, that mankind in its ingenuity and arrogance had suddenly gotten hold of the power "to change drastically—or even destroy—the physical world."

Her own wide reading and her conversations with other scientists led her to focus on the misuse of chemical pesticides as the symbol of what had gone wrong. Only a few years earlier those new chemicals, especially DDT, had been hailed as humanity's savior, weapons that would finally solve the age-old problems posed by noxious insects and other pest organisms. Massive doses of the new chemicals, often spread by planes, became the prescription for all pest problems. It became apparent after a while that many kinds of animals besides insects were affected by the chemicals, and, as Carson realized, no one had any idea of their ultimate effect on the foundations of life itself.

At first she had no intention of writing a book about pesticides. She suggested the idea to others, but got little response. Eventually it became clear that she was the leading candidate to tackle the subject, for no one else had such excellent credentials—her scientific background, her love for the natural world, her writing skill and her stature in American letters.





The "brief book" on the subject that she had envisioned grew as she began to dig into the evidence that mankind had badly misused these toxic substances. Despite the fact that she was already suffering from the illness that would kill her (cancer), she pushed on for four years—reading, asking questions, writing and re-writing. When her book, *Silent Spring*, was published in 1962, the uproar it caused and the influence it exerted was compared to that of an earlier classic, Harriet Beecher Stowe's *Uncle Tom's Cabin*.

Why was a writer who spoke out against the contamination of the environment so savagely attacked from many quarters? In part it was because of the nature of her subject. Chemical pesticides, used in the right way, have been a valuable tool, increasing agricultural production and protecting human lives. A number of men and women of good will saw in *Silent Spring* an attempt to turn back the clock, depriving humanity of a weapon against pests at a critical moment in history.

But Carson did not call for the abandonment of all chemical pesticides. She asked for a ban on the more insidious, long-lasting chemicals like DDT, against which there was increasing evidence of harmful effects to many living things. She asked also that the other chemicals be used more judiciously and that the regulations for their manufacture and sale be considerably tightened. Finally, she asked that scientists redouble their efforts to find alternative methods for fighting pests, such as biological controls, so that the flow of deadly poisons into the environment might be restricted. Despite the initial flood of hostile criticism, Carson's argument had stood the test of time. As early as 1963, President Kennedy's Science Advisory Committee substantially supported her position that pesticides were being misused in this country. Laws and regulations have been tightened, and most of the chemicals whose use she criticized have been banned.

Her investigation of the threatened roots of life was so profound, and her voice so eloquent, that her message carried beyond the specific problem of pesticide use.

"There is no question," a government expert on natural resources said following her death, "that *Silent Spring* prompted the Federal Government to take action against water and air pollution—as well as against the misuse of pesticides—several years before it otherwise might have moved."

Serious questions remain about the long-term effects of environmental contaminants on life. Despite many changes for the good, Americans now apply more than twice the amount of pesticides they did before *Silent Spring* was published, and totals also are increasing around the world.

But the dialogue about the benefits and hazards of their use will never be quite the same. The voice of one woman opened the "Age of Ecology," prompting other people in all walks of life to insist on working toward a clean environment for ourselves and the creatures with which we share the Earth. Perhaps David Browner, an eminent conservationist in his own right, best summed up Rachel Carson's achievement: "She did her homework, she minded her English, and she cared."

Source: U.S. Environmental Protection Agency. (1978). "Rachel Carson." EPA Journal. Retrieved July 3, 2005, from http://www.epa.gov/history/topics/perspect/carson.htm.



Silent Spring Revisited

Rachel Carson wrote Silent Spring in 1962. What impact do you think 1 it had on those reading the book at that time? Was the Environmental Protection Agency in existence then?





2 Why did people find it hard to believe that pesticides were a problem?



What influence do you think Silent Spring had on environmental awareness in the United States?

