

Rachel Carson

Carson, Rachel

By Elizabeth J. Greene

Graduate Student, Indiana University at Bloomington

The Notion entertained by some, that the Blacks are inferior to the Whites in their capacities,
is a vulgar prejudice.

-Anthony Benezet

Biographical Highlights

Dr. Wilhelm C. Hueper of the National Cancer Institute described Rachel Carson (1907-1964) as "a sincere, unusually well-informed scientist possessing not only an unusual degree of social responsibility but also having the courage and ability to express and fight for her convictions and principles" (Brooks 1972, 255). However, others have depicted her as "a literary artist whose subject was science, a perfectionist both in the clear communication of facts and ideas, and in the use of sounds, rhythms, images, and form" (Gartner 1983, 2). Although many might consider the two illustrations incompatible, Carson herself believed that the goals of a scientist and writer were one and the same, "the aim of science is to discover and illuminate truth. And that, I take it, is the aim of literature. . ." (Brooks 1972, 128).

Over the course of her lifetime, Carson wrote many articles and best-selling books including *Under the Sea-Wind* (1941), *The Sea Around Us* (1951), *The Edge of the Sea* (1955), and the controversial *Silent Spring* (1962). She made science accessible to the public through her clear but precise writing and stimulated interest in the natural world through her vivid, expressive prose. She rallied for conservation efforts and fought for education about and reduction of environmental hazards, the most well-known of which was her expose of DDT and related pesticides.

Over the course of her lifetime, Carson was the recipient of many awards including the Schweitzer Medal of the Animal Welfare Institute. She was honored by the National Audubon Society, the American Geographical Society, the American Association of University Women, and the National Wildlife Federation. She was elected to the American Academy of Arts and Letters in 1963 and was posthumously awarded the President's Medal of Freedom in 1980.

Historic Roots



Born on 27 May 1907 in Springdale, Pennsylvania, to Maria Frazier (McLean) and Robert Warden Carson, Rachel Louise Carson was the youngest of three children. As eight years separated her from her youngest sibling, her childhood experience was similar to that of an only child. Her mother, who was not employed outside of the home, was very protective of Carson and often kept her out of school for fear of contagious illness. Carson spent her time at home, reading, writing, and observing wildlife in the rural countryside surrounding the Carson homestead. This helped her progress in her education in spite of her frequent absences from school.

When she was ten, Carson's story called "A Battle in the Clouds" was printed in *St. Nicholas*, a children's literary magazine where William Faulkner, F. Scott Fitzgerald, e.e. cummings, Edna St. Millay, and E.B. White were first published. Having three other stories published that year and winning awards that resulted in cash prizes led Carson to thinking of writing as a possible profession. She was encouraged by her teachers at Parnassus High School and by her mother. Carson's promise earned a scholarship for her to attend the nearby Pennsylvania College for Women in Pittsburgh (now Chatham College).

In her second year of college, Carson enrolled in a biology class to fulfill her science requirement. There she met Mary Scott Skinker, a demanding but enthusiastic professor, who became Carson's inspiration. Skinker revived Carson's love of nature and fostered her interest in the subject so much that in 1927 Carson changed her major from English to biology. In 1929, she received a Bachelor of Arts degree magna cum laude. Before beginning graduate study in zoology at Johns Hopkins University, Carson won a place to study at Woods Hole, Massachusetts, where she saw the ocean for the first time, a subject on which would Carson would later write three books and many articles.

She received her master's degree in 1932 and began working for the U.S. Bureau of Fisheries, first writing radio scripts for a temporary project on marine life in 1935 and then working in a permanent position as a junior aquatic biologist a year later. During this time, Carson wrote and edited many government documents and pamphlets educating the public. Following the request to write an introduction for a booklet based on her marine radio scripts, Carson submitted her writing to her supervisor Elmer Higgins. Higgins replied that it was too good for a government brochure and suggested that she send it to the *Atlantic Monthly*, the top literary magazine of the day. In time, Carson did and the article was published in September 1937 with the title of "Undersea" and would become the basis for her first book, *Under the Sea Wind*. The book was published in 1941 and initially received positive reviews, but due to political events, specifically the attack on Pearl Harbor that occurred a month later, the sales and success of the book were drastically diminished.



Due to the war, Carson's involvement in government work increased, resulting in limited time and energy to devote to her creative writing over the next few years. However, her position at the U.S. Bureau of Fisheries offered her many opportunities to travel and observe different wildlife populations and environments. She made trips to the Florida Everglades, Chincoteague Island off the coast of Maryland, the National Bison Range refuge in Montana, and the fisheries on the Columbia River in Oregon, while also exploring areas closer to home with friends on the weekends. In the summer of 1946, Carson first rented a cabin on the Sheepscot River near Boothbay, Maine. She fell in love with the area and it became a refuge where Carson found peace and rejuvenation. She returned every summer and dreamed of buying part of the coast to set aside for a wildlife sanctuary. Although the dream was never realized during her lifetime, the Coastal Maine Wildlife Refuge was renamed for Carson in 1969.

In 1948, Carson began working on her second book, *The Sea Around Us*. For her research, she undertook a brief diving excursion in Florida, as well as a ten-day fishing trip to the Georges Bank on the *Albatross III*. She finished her manuscript in July 1950 and handed it to her publisher, the Oxford Press. Several chapters were sold to magazines such as the *Yale Review*, *Science Digest*, and the *New Yorker*, in advance of the book release. On July 2, 1951, *The Sea Around Us* was released to the public and three weeks later, it appeared in fifth place on the *New York Times* Bestseller List. It remained on the list for eighty-six weeks and Oxford Press could not keep up with the printing demand for the popular book. By the year's end, it won the prestigious National Book Award for Nonfiction and the Burroughs Medal for excellence in nature writing.

With the success of *The Sea Around Us* and winning the Guggenheim Fellowship, Carson was financially secure. This enabled her to resign from her government position and devote all her time to writing her next book, later called *The Edge of the Sea* (published in 1955). In 1957, Carson wrote the article "Help Your Child to Wonder" for the *Woman's Home Companion*, which was partly inspired by her grandnephew, Roger, who she and her mother had adopted upon the death of Carson's niece. Her intent was to expand it into a book, but the project was never completed. It was published posthumously in book form called *The Sense of Wonder*.

In 1958, Olga Owens Huckins from Duxbury, Massachusetts, wrote Carson, asking for assistance with her problematic situation. The Huckinses had a private bird sanctuary that had been destroyed when the state sprayed fuel oil and DDT to rid the area of mosquitoes. Carson had been concerned about pesticides since her work for the U.S. Fish and Wildlife Service. As Carson searched for the answer to Huckins's question, she became alarmed and realized that she needed to act. She decided to compose articles and books about DDT and other toxic pesticides for Houghton Mifflin and *The New Yorker*. This material became the



basis for the work known as *Silent Spring*. The book, published in 1962, was a scathing attack on the agricultural industry for their false reports and on the medical community and related governmental agencies for their complacency. It generated much controversy but, in 1963, President John F. Kennedy's Science Advisory Committee released their findings that supported Carson's research. In 1964, in Silver Spring, Maryland, Carson died of heart failure and cancer.

Importance

Rachel Carson's work challenged the dominant American ideology of man's struggle against nature that originated during the initial settlements of the country. The pre- *Silent Spring* era, as described by historian Thomas Dunlap, was a time in which "Americans assumed that science was good, that chemicals were necessary, that their use would be governed by experts, that these experts could be trusted, and that the side-effects of chemical use would be negligible" (Hynes 1989, 47). After the Depression and World War II, the United States emerged with unassailable confidence of the government, developing technology, and the capitalist market economy. In spite of the fear brought on by the Soviet Union's launching of Sputnik and the nuclear arms race in the 1950s, the self-important culture remained. In addition, DDT was hailed as the success story of World War II. During the war, the chemical helped to exterminate lice and insect-borne disease, and saved much-needed food crops. When the war ended, the United States sought to become the top food supplier and the Department of Agriculture saw DDT as a means to achieve that end.

Carson's works challenged these institutions and the assumptions they encouraged. She deplored the "culture of American abundance" as incurred by the capitalist economy whose expanding nature led to the destruction of many wildlife habitats (Lear 1997, 137). In an essay for *Outdoor Life* magazine, Carson wrote,

Because it is more comfortable to believe in pleasant things, most of us continue today to believe that in our country there will always be plenty. . . This is the comfortable dream of the average American. But it is a fallacious dream. It is a dangerous dream. . . Only so long as we are vigilant to cherish and safeguard [our resources] against waste, against over exploitation, and against destruction will our country continue strong and free. (Ibid.)

She also admonished against the American desire for a quick fix:

. . . one great trouble — I suppose it is the fault of the American public as a whole - is this desire for the quick and easy way of doing something, without any consideration of the consequences. Even if the consequences are strongly implied or known, there is still a great



temptation to go ahead and get the job done and let the future take care of itself. Maybe we will come up with a pill to take care of it, or something like that! (Ibid., 358)

However, in spite of her controversial criticism of American culture, Carson could not be easily dismissed. The impact of *Silent Spring* was colossal. In *Books that Changed America*, Robert B. Downs wrote that *Silent Spring* was "comparable in its impact on public consciousness, and demand for instant action, to Tom Paine's *Common Sense*, Harriet Beecher Stowe's *Uncle Tom's Cabin*, and Upton Sinclair's *The Jungle*" (McCay 1993, 63). This occurred in part due to the controversy caused by challenging the powerful institutions of the chemical industry, the associated governmental departments, and the medical community.

Carson's appeal also occurred due to her masterful literary skills. Her ability to write eloquently and persuasively and to articulate scientific research in language that the public could understand had a profound effect on the burgeoning environmental movement. The work connected regional concerns about pesticide use (such as the fire ant program in the South, the Long Island court trial, and the Cranberry Scare) to display a growing national problem. Carson understood that the timing was crucial: "I am pressing ahead just as fast as I can, driven by the knowledge that the book is desperately needed. Unquestionably, what it has to say will come as news to 99 out of 100 people" (Lear 1997, 347). Indeed, the message had far-reaching effects including President John F. Kennedy, who cited Carson's book in calling the President's Science Advisory Committee to look into pesticides. When the report supported Carson's claims, the tide of indiscriminate use of pesticides had turned.

Ties to the Philanthropic Sector

Carson's philanthropic contributions result from her devotion to creating, in the words of Albert Schweitzer, a "reverence for life", for human, plant, animal, and even insect life. While some may question this ideology by presenting examples of conflict between these forms of life, Carson believed that a balance was achievable and that all deserved respect and protection.

One of Carson's friendships was with Judge Curtis Bok, son of publisher and philanthropist Edward W. Bok. The elder Bok was founder of The American Foundation whose mission was to create public gardens and sanctuaries for rare and endangered birds and plants. In working with Bok and the American Foundation, as well as The Nature Conservancy, Carson saw the importance of individual involvement in conservation and the possibilities of fulfilling her dream of a Maine wildlife refuge in Southport, a project Carson called the Lost Woods.



Carson felt that it was necessary to write *Silent Spring* because she believed that humans had an inviolable right to live in a world free from pollution and chemical poisons. Widespread spraying of DDT and related pesticides contaminated the air, the water, and the food supply. The contamination that resulted, killed fish, birds, and other wildlife, as well as domestic pets, and the cumulative effect on humans was not known.

In addition, Carson was concerned because the pesticides were used indiscriminately, often killing off all insect populations besides the one targeted. In the case of surviving insects, the practice created a new pesticide-resistant race. While personally against all pesticides, she never advocated such in her writing, as many of her critics claimed. Instead, she argued that not enough research had been done on the long-term effects of the chemical exposure, that alternatives had not been fully explored, and that the dangers of spraying had not been properly communicated to the public.

In addition, Carson strove to create the feelings of wonder and awe in her works that she and many of her readers had experienced firsthand in witnessing many natural phenomena. Carson felt that this was important in order to relieve stress and tension evoked by human society. She believed her works addressed the need to understand where humans fit in the cosmos and the evolution of time, a need which had been generated by the arms race, the McCarthy-era search for Communists, and the impending threat of war in Korea. By understanding the place of humans in the ecosystem and the larger environmental and evolutionary forces at work, one could see the insignificance of human stressors and problems brought on by civilization. In her article "Help Your Child to Wonder," Carson (1957) wrote, "if I had influence with the good fairy who is supposed to preside over the christening of all children I should ask that her gift to each child in the world would be a sense of wonder so indestructible against the boredom and disenchantments of later years, the sterile preoccupation with things that are artificial, the alienation from the sources of our strength."

Key Related Ideas

Carson is the person most responsible for introducing the public to the concept of **ecology** (Brooks 1972, xi; Hynes 1989, 8). In her works, the theme underlying her writing regardless of the specific subject matter is the interconnectedness of all living creatures to each other and to their environment. Carson also explored a second meaning of ecology, the study of the detrimental effects of modern civilization on the environment, with the viewpoint of prevention or reversal through conservation. Carson expressed a concern for the effects of civilization and the power that humans have to advertently and inadvertently destroy various



forms of life on earth and the natural resources needed to sustain life. Unless humans understood the impact of their actions on the environment, the natural world would be permanently altered for the rest of time. She also articulated the importance of **conservation**, or the controlled use and systematic protection of natural resources such as forests, soil and water systems. She realized the irreplaceable nature of the earth and was devoted to preserving areas of beauty for future generations.

This paper was developed by a student taking a Philanthropic Studies course taught at Indiana University at Bloomington. It is offered by *Learning To Give* and Indiana University at Bloomington.

