# Endangered Legacy Reclaiming the Significance of Rachel Carson's Life and Work

Time Magazine recently included Silent Spring, Rachel Carson's controversial attack on the misuse of pesticides, as one of the 100 most significant books of the century. Yet Carson's achievements and contributions, which changed the course of environmental history, are generally not understood or recognized by most Americans born after the Vietnam War.

I was saddened but not surprised when reviewers commented that until the publication of my biography, Rachel Carson: Witness for Nature, she was at the top of the list of "endangered American nature writers."

As a professor of environmental history, I know all too well that student appreciation of Carson's life and work is ephemeral at best. Those majoring in environmental studies usually recognize the title Silent Spring but they are often uncertain who wrote it. An honors student in literature at the University of Toronto recalled only that one of her professors ranted about Carson's lack of feminism. Female high school graduates may recognize Carson as a pioneering scientist because of the many books written for teenagers that cast her as a role model for women.

I was gratified recently when an undergraduate at the Wharton Business School at the University of Pennsylvania told me that he wrote a cost/benefit analysis of Silent Spring when he was in high school. He then asked my son, a fellow student at Penn, if he could get an autographed copy of my biography. But that same smart student could not name any of Carson's other books.

Many adult audiences I have spoken to are equally vague about Carson's legacy. I recently gave a seminar at a Washington think-tank where I was dismayed to discover that only a few scholars knew much about Carson's larger impact on environmental policy from ocean dumping to animal rights, and almost none of them had any idea about the significance of her nature writing on the contemporary environmental movement.

When Carson is remembered, it is almost always as the author of Silent Spring. Yet, in some science circles, she is still denigrated as the overly emotional woman whose exposé of the environmental dangers of pesticides caused a lot of unnecessary alarm during the Cold War and whose polemic earned the unmitigated hostility of the agriculture, food, and health industries. As a biologist she is suspect—a woman without a PhD or any refereed research papers.

In the contemporary environmental community, ironically, Carson has been almost forgotten as a naturalist, as a 20th century biographer of the sea, or as the author of three best-selling environmental books that garnered every major literary prize except the Pulitzer. Though her name was a household word in the 1960s, synonymous with environmental activism, many environmentalists regard Carson as a bloodless, iconic, and hopelessly romantic figure whose concern for the natural world shaped today's environmental movement, but whose life was irrelevant to its outcome.

### Reclaiming A Legacy

Only in the community of naturalists and nature writers, it seems, is Carson remembered, correctly I believe, as not only a nature writer and scientists but also as a seminal ecological thinker whose work indelibly influenced our post modern construction of the natural world.

Clearly, Carson's legacy needed reclaiming. And so, at the risk of preaching to the choir, I want to discuss her work as a naturalist, her integrity as a writer, and her completeness in living. By integrity I mean living as if we are about to die-keeping the better and deeper principles of life close at hand, aligned with our behavior. Completeness is simply making sure that time is not wasted.

Carson's literary legacy is only four books—the trilogy on the sea and Silent Spring. But those volumes are enough to change how humankind regards the living world and the future of life on this earth. Her literary reputation rests primarily on two of those works: The Sea Around Us and Silent Spring.

Scholars have treated Silent Spring as an aberrant work, different in tone and style from Carson's other works. That is a mistake. The writer who synthesized the scientific literature on the sea to help the public understand and respect the eternal cycles and rhythms of ocean life is the same writer who synthesized the literature on pesticides to warn the public that nature was interconnected and that to damage one part was ultimately to damage the whole



The ecological unity that so intimately pervades Carson's sea books also binds her analysis of the changes in water, soil, air, and the molecular structure of life in Silent Spring, though admittedly her tone in this last work is often angry and her language more biting than lyrical.

Linda Lear is Research Professor of Environmental History at George Washington University and Research Collaborator in the Office of Smithsonian Institution Archives. This article was adapted from lectures that Dr. Lear presented at the Interior Museum on June 23 and at the U.S. Fish and Wildlife Service, Arlington Square Building, on June 25.



Photo courtesy of Brooks Studio, Rachel Carson History Project

The magnitude of Carson's impact on the public's understanding—from the 1950s through the early 1970s—of such issues as ecology and environmental change still astonishes. Two volumes of her trilogy, The Sea Around Us and The Edge of the Sea, published in 1955, were serialized in the New Yorker Magazine. All three volumes, including *Under the Sea Wind*, which originally appeared in 1941 and was republished in 1952, appeared on The New York Times Best-seller List for many months. The Sea Around Us maintained its place on the list for a record 86 weeks and was translated into 33 languages.

Silent Spring was also serialized in the New Yorker Magazine, making Carson the first woman writer ever to have her work introduced in that prestigious publication on three occasions. After its publication in September 1962, almost one million copies of Silent Spring were sold within 18 months. It was translated into 22 languages and still sells more than 27,000 copies every year.

## A Writing Life

At the time of her death in April 1964, Carson had garnered an international reputation as a scientist, nature writer, and public voice for the care of the earth. She was the most celebrated science writer of her generation, acclaimed a literary giant of the 20th century, and showered with honors.

Yet the pace and pressure of Carson's life always militated against there ever being a large body of writing. By nature she was a painstaking craftsman. She worked slowly and methodically, unwilling to move from one sentence to another until the first met her syntactical and lyrical satisfaction. She revised endlessly, read everything out-loud, and had it read back to her, until satisfied with its tone, alliteration, and clarity

A perfectionist in form and structure, Carson was also a meticulous researcher whose demand for scientific accuracy was legendary among her government colleagues. assistants, and editors. Even those descriptions of tides and shore activities that she shared in letters to her Maine neighbors, **Dorothy** and **Stan Freeman**, were not mailed until she was certain that her explanations were correct.

Carson wrote with accuracy, with love, and with integrity about the living world, but she always considered her contributions to scientific fact less important than her attempts to awaken the emotions. When she wrote, she captivated readers by her lyric prose and her ability to draw them into her world, be it underwater, strolling along a beach, or describing the web of life.

Because it took me almost a decade to write Carson's life, it was gratifying to learn that she never finished a manuscript or an article on time, with the possible exception of the newspaper feature stories she wrote in the 1930s under deadline pressure from the Baltimore Sun. But it was heart-breaking to piece together the nearly overwhelming burden of family responsibility and emotional demand that prevented her from achieving the corpus of work that she had dreamed of producing and had the talent and vision to create.

Carson had plans for at least four other major works when she succumbed to misdiagnosed and aggressively metastasizing breast cancer. She had been collecting material for a scientific study of evolution, and had a book contract from Harper Brothers for a more philosophical examination of ecology.

She had started to revise and expand her earlier magazine article on exploring the natural world with children, and she was intrigued by new discoveries in atmospheric science and climate and hoped to write something in this emerging field. Carson was a passionate supporter of the humane treatment of animals and hoped to contribute her thoughts to this emotionally charged area as well.

Her literary papers display a full range of natural history topics that she had, in one way or another, committed herself to write about and many more that she hoped one day to have the time to pursue. But time ran out.

#### The Politics of the Environment

Most commentators skip the fact that Carson spent 15 years of her brief life as a federal scientist and editor: first, in the Bureau of Fisheries at the Department of Agriculture; and after 1939, when the bureau was absorbed into the Department of the Interior, in the U.S. Fish and Wildlife Service.

Most male scholars have dismissed her career in federal service as mere time serving a period when Carson wrote at night and bided her time until she had the means to quit the drudge work of being a bureaucrat and devote herself to her literary craft.

Such a view misses the crucial ways in which her work in the Federal Government deepened her emotional connections to the natural world. As a federal scientist she was exposed to a breadth and diversity of research that was available no where else. The view also overlooks Carson's crucial education in the politics of the environment as well as the vital personal connections she made during these years.

In the 1930s Carson visited fisheries and wildlife refuges around the Chesapeake Bay watershed to verify data on fish populations and habitat. She pursued her interest in the migratory habits of the North American eel, that mysterious creature which first appears in her most successful natural history, Under the Sea-Wind. Research on dwindling oyster beds, the industrial pollution of fishing grounds, and the human disturbance of coastal habitat impressed her with the need for more effective conservation measures and deepened her interest in the ecology of tidal estuaries.

As editor in chief of Fish and Wildlife Service publications, Carson created a new series of government brochures to highlight the national wildlife refuges that had come into the system during the war. The assignment gave her the only opportunity she ever had to travel extensively in the western United States, without her mother, and to see these remote places for herself. Deeply interested in the habitat and migratory patterns of shore birds and waterfowl, Carson designed and wrote four of the five numbers of Conservation in Action around the refuges of the eastern flyway.

At one of these—Mattamuskeet, a refuge off Albemarle Sound in North Carolina—she spent the morning listening to the sounds of the rare whistling swan. She wrote in her field notes: "Throughout much of the day, their wings pattern the sky above you. Underlying all the other sounds of the refuge is their wild music, rising at times to a

great, tumultuous crescendo, and dying away again to a throbbing undercurrent. We heard . . . the high thin note, almost a woodwind quality, that presumably gives them their name. I still think the sound of a large flock of geese is one of the most thrilling in the world. It is the sound of Mattamuskeet that impressed me more than anything else—the geese, the frogs at night, the sound of bird wings, and the splashing of unseen deer in the swamps."

Carson served at Interior when it was headed by Harold L. Ickes, an ardent and activist preservationist secretary. In the 1940s, she was frequently asked to write speeches for the secretary's office or to prepare congressional testimony. Carson lent her skills to such conservation activists as Howard Zahniser, wrote anonymous speeches, and penned powerful editorials published in *The Washington Post*. Because of her government experience, she became not only a different kind of naturalist and



Photo courtesy of Brooks Studio Rachel Carson History Project

nature writer but also an accomplished political infighter, acutely aware of the compromises that were necessary to protect the natural world.

Carson's years in Washington provided her with unequaled opportunity to expand her under-standing of other areas of science. She joined the District of Columbia Audubon Society, where she went birding with the artist Roger Tory Peterson, and participated in field excursions with a unique group of federal scientists, all of who enthusiastically shared their disciplines. Carson's editorial position with the Fish and Wildlife Service connected her to archivists, librarians, and scientists throughout the Federal Government who provided her information and access to material for her trilogy on

# Interior Museum Plans Rachel Carson Exhibit

In the coming year, the Interior museum will begin the development of a Rachel Carson exhibit that will chronicle her career with the Fish and Wildlife Service, the importance of her writings as milestones of literary achievement and conservation activism, and the Service's contributions to her writings. Look for the display in the recently updated Fish and Wildlife Service gallery during fiscal year 1999.

**Rachel Carson: Witness for** Nature by Linda Lear is published by Holt (1997) and available on-line at Amazon.com and most major book stores. A paperback edition is due out in September. Lear also is editor of an anthology, Lost Woods: The Discovered Writing of Rachel Carson, published by Beacon Press and due

the sea. (Sadly, that could not happen today, because federal scientists are now prohibited from using data developed on the job in their private writing.)

out in October. Lear can be reached on-line at **<www.rachelcarson.org\html>** 

Carson also sat on interagency military committees during and immediately after the war where she was privy to the latest discoveries in oceanography, the effects of atomic testing on the flora and fauna of Pacific atolls, and the disappearance of species. And because The Sea Around Us earned her a reputation for accuracy as well as lyric prose, some of these same scientists years later secretly provided her research data on pesticide abuse when she was unable to obtain that information through open inquiry.

#### Science and a Sense of the Beautiful

Carson's work with the Fish and Wildlife Service gave her the opportunity to synthesize science and deepened her love of the natural world that she knew first hand was increasingly at risk. She retired from federal service in 1952, after the sale of The Sea Around Us gave her a measure of financial independence. That January she was honored by the National Book Award in nonfiction, the New York Zoological Medal, and the Burroughs Medal. Her public remarks on these occasions reveal that her years in government had also given her a vital, even radical perspective from which to warn against the isolation of both science and literature in post-war America.

Carson attacked the notion that science belongs in a separate compartment, apart from everyday life, as the prerogative of a small number of human beings, mostly male, isolated, and priest-like in their laboratories. "The materials of science," she said, "are the materials of life itself. Science is part of the reality of living; it is the what, the how, and the why of everything in our experience. It is impossible to understand man without understanding his environment and the forces that have molded him physically and mentally."

Seven years before **C.P. Snow** warned against the separation of "two cultures," Carson wrote, "the aim of science is to discover and illuminate truth. And that, I take it, is the aim of literature. It seems to me, then, that there can be no separate literature of science." After writing The Sea Around Us, Carson explained, "my own guiding purpose was to portray the subject of the sea with fidelity and understanding. I did not stop to consider whether I was doing it scientifically or poetically; I was writing as the subject demanded. The winds, the sea, and the moving tides are what they are. If there is wonder and beauty and majesty in them, science will discover these qualities. If they are not there, science cannot create them. If there is poetry in my book about the sea, it is not because I deliberately put it there, but because no one could write truthfully about the sea and leave out the poetry."

In her 1956 article Help Your Child to Wonder, published posthumously in 1965 as The Sense of Wonder and recently republished by Harpercollins, Carson warned against teaching children to know facts in favor of letting them use their senses to experience and feel. "If facts are the seeds that later produce knowledge and wisdom," she wrote, "then the emotions and the impressions of the senses are the fertile soil in which the seeds must grow. The years of early childhood are the time to prepare the soil

Her creed as a nature writer can be summed up in one telling sentence: "Once the emotions have been aroused—a sense of the beautiful, the excitement of the new and the unknown, a feeling of sympathy, pity, admiration or love—then we wish for knowledge about the object of our emotional response. Once found, it has lasting meaning." Carson wanted us to love nature as she did. It was her integrity—as a scientist searching for accuracy and as a nature writer intent upon telling the truth of the experience-that makes her work so memorable and gives it such power and completeness. She lived briefly and intensely. And she wrote as she lived.

Just before Silent Spring was published in the New Yorker Magazine, Carson revealed something of the passion and integrity with which she endowed her crusade against pesticides. "I never thought the ugly facts would dominate, and I hope they don't," she told her friend and fellow nature lover Lois Crisler. "The beauty of the living world I was trying to save has always been uppermost in my mind—that, and anger at the senseless brutish things that were being done. I was bound by a solemn obligation to do what I could—if I didn't at least try I could never again be happy in nature."