

BOOK REVIEWS

Environmental Pioneer

Rachel Carson. *Witness for Nature.* LINDA LEAR. Holt, New York, 1997. xviii, 634 pp., illus., + plates. Paper, \$35 or C\$49. ISBN 0-8050-3427-7.

A new film by Allie Light and Irving Saraf about the possible environmental causes of breast cancer tells the stories of seven women who share personal anecdotes about their exposure to potential carcinogens and its contribution to their diagnosis. Titled "Rachel's Daughters: Searching for the Causes of Breast Cancer," the film is named after Rachel Carson, who, in her award-winning book *Silent Spring*, documented the harmful effects of the profligate use of pesticides on the environment. Carson herself died of breast cancer at the age of 57 and at the peak of her talents in 1964, soon after the book's publication.

After reading Linda Lear's masterful biography of Rachel Carson, I am convinced that Carson would probably have hated being used as a poster child for breast cancer. Carson was an intensely private person; she hid her disease until almost the end of her life from all except those closest to her, and she burned much of her most personal correspondence. She was irritated by critics and fans who were more curious about her personal appearance than about her credentials. Moreover, she did not see herself as a champion for human sufferers of disease but rather as a defender of the natural world.

The book is aptly subtitled; Carson truly was a witness for nature. Although she was concerned with the effects of toxins on human life, her concern stemmed primarily from the manifestation of a graver problem—the wanton disregard for the environment by much of the science and technology establishment after World War II.

Carson grew up in rural Pennsylvania, miles from the sea that was to define her scientific and much of her literary life. She was originally interested in becoming a writer, not a scientist, and the link (and occasional tension) between science and the humanities was a recurring theme for her. As a student in a small women's college in Pittsburgh, she agonized over her major, finally settling on biology. She obtained a master's degree in zoology from Johns Hopkins University, with a thesis on development in catfish. During

her education, as through much of the rest of her life, she was plagued with family problems and the need to earn enough money for her own expenses, as well as those of her relatives. After graduating, she eventually took a job as a government writer with the Bureau of Fisheries. She used this position to gain vast knowledge of aquatic biology and to develop her ability to explain the world of science in almost-poetic language without sacrificing clarity or accuracy.

This biography traces Carson's progression through the ranks of federal employ-



Rachel disposing of marine specimens.

ment, the writing of her first book, *Under the Sea Wind* (1941), and her struggles with being a female scientist in the 1930s and 40s, and it discusses her more well-known achievements and the events leading up to *Silent Spring*. Lear expertly walks the path between exploration of Carson's personal life and motivations and mere snooping. For example, the intense, loving relationship between Carson and Dorothy Freeman—who, with her husband Stanley, was a neighbor of Carson at her summer home in Maine—is described in sufficient detail, but without being purient, convincing the reader that the two had an intimacy that defied categorization (*Science* 26 May 1995, p. 1203).

A recurring theme in Carson's life and work is the blending of dichotomies that often trouble others: basic vs. applied science, "scientific" writing vs. popular prose, technology vs. the human spirit. She was part Lewis Thomas, part Stephen Hawking, and part John Muir. She even dealt ably with a

creationist critique of her writings. Part of her motivation in writing her first three books about the ocean (*Under the Sea Wind*, *The Sea Around Us*, and *The Edge of the Sea*) was to convey her sense of the mystery and wonder in scientific facts about nature to the public. She labored over her style, and had her mother read her early work aloud so that she could monitor its cadence. Her facts were always meticulously checked and rechecked, a habit that sometimes caused her to miss deadlines but which put her in good stead when *Silent Spring* came under the guns of the insecticide companies and government agencies favoring virtually indiscriminate use of pesticides. Such critics tried to discredit her work, often using the tactic of scoffing at the very talent that made her early work so accessible; surely, the entomologists argued, anyone who used such graceful language could not understand the data.

Silent Spring was published over 30 years ago, in 1962, and it is easy to forget the impact the book had at a time when technology was seen as the panacea for a post-Sputnik, Cold War society. As a result of her work, Carson was directly responsible for some of the policy recommendations in the President's Science Advisory Committee report on pesticides. She was interviewed on CBS by Eric Sevareid, after which Connecticut Senator Abraham Ribicoff invited her to testify before a Senate committee on environmental hazards. The senator told her: "There can be no doubt that you are the person most responsible for the current public concern over pesticide hazards" (p. 454). Bombarded as the public is now about the dangers of pollution and environmental degradation, it is amazing to realize that Carson's book was a best-seller for many months. Somehow, she managed to take a highly technical topic and make it meaningful for everyone. Yet she was not an extremist; she maintained all along that she did not favor the complete banning of insecticides, but rather advocated a more reasoned and informed approach to their use. She was, indeed, one of the founders of modern conservation biology.

This biography is one of the best I have read. The combination of meticulous scholarship and thoughtful, often poignant, writing kept me engrossed through the entire book, despite its length. The final chapter concerns Carson's death, and the reader mourns her passing—but I was also sorry to have this account of a remarkable life come to an end.

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