Chemical addiction

By Valerie Weaver-Zercher in the May 1, 2007 issue

In Review



The Gentle Subversive: Rachel Carson, Silent Spring, and the Rise of the Environmental Movement

Mark Hamilton Lytle Oxford University Press I think of myself as rather ecologically savvy. I buy vegetables from a chemical-free subscription farm during the growing season and use organic lawn fertilizer. My fouryear-old has been known to hold up an apple and ask with suspicion, "Was this one grown with chemicals?"

Several years ago, however, when I found lice on my scalp and the heads of my sons, I promptly submerged any environmentalist inclinations under a wave of delousing shampoo. My brother-in-law, an organic farmer, called us after hearing about our infestation; he had done some research into permethrin, the pesticide used in most antilice shampoos, and cautioned me against using it. He spoke with a measure of authority and urgency that I had rarely heard him use. I appreciated his concern, but from where I stood in lice land, any substance that quickly dispatched our parasites was a friend of mine.

So when I read Mark Hamilton Lytle's story of Rachel Carson and her 1962 best seller *Silent Spring*, the classic indictment of pesticides that essentially launched the modern environmental movement, I winced to remember my own behavior. Had I actually spread a neurotoxin on the heads of my children? So much for environmental commitment.

Many people associate Carson's groundbreaking book primarily with DDT, a pesticide that was first used to combat head lice during World War II and that the Environmental Protection Agency banned for use in the United States in 1972, thanks largely to *Silent Spring*. (The manufacture and export of DDT continued for much longer; the last DDT manufacturing plant in the U.S. was dismantled in 1983.) While Carson did give special attention to the hazards of DDT, which has been called the "father of all pesticides," the book dealt with the ecological and human health threats of a variety of other pesticides too, many of which are still widely used. It is unfortunate that the popular pairing of *Silent Spring* and DDT has dated and defanged the book in the minds of many people: "Oh, yes, *Silent Spring* warned us about DDT; we paid attention and banned it; thank you, Rachel Carson."

Lytle's account of Carson's life and work highlights the scope of her influence. Carson's writing was labeled subversive, Lytle claims, not merely because she took on agribusiness and chemical companies over DDT and other "biocides" (her term, to emphasize their effects on the entire biosphere, not just insects). Carson was viewed as a threat because of her profound critique of a worldview that locates human beings at the center of the universe and the natural world at the periphery.

She had initially planned to write simply about the dangers posed by pesticides, but her "moral outrage mounted" as she researched her topic, and "she quite selfconsciously decided to write a book calling into question the paradigm of scientific progress that defined postwar American culture." In the biocentric paradigm advanced by Carson and her colleagues, humans are one of many species that interact within an intricate ecological web, not the central focus.

This nature-centered perspective was nurtured by Carson's mother, a Presbyterian and former teacher who taught Rachel to closely observe and love the natural world, and who insisted that her daughter return any living specimen she brought home to its original habitat (a practice that Carson continued as a scientist). Although as an adult Carson no longer held to the Christian faith of her mother, she resented the implication that she was an atheist. "As far as I am concerned," she wrote, "there is absolutely no conflict between a belief in evolution and a belief in God as the creator." Carson may have remained ostensibly irreligious, but many observers have pointed to her prophetic and moral role in criticizing a scientific culture that had only just begun to play God.

When Carson wrote her first book, *Under the Sea-Wind*, she was still optimistic that humankind would maintain its relatively humble and limited role on the planet. While the natural environment fashioned the patterns of human life, she claimed, humans remained relatively harmless participants within that environment. Then the U.S. dropped atom bombs on Nagasaki and Hiroshima, and Carson began her research for *Silent Spring*. She became increasingly convinced that through synthetic chemicals and nuclear power, humankind had "acquired significant power to alter the nature of [the] world."

Statements like this will prompt many modern readers to draw parallels between Carson's work and the 21st-century discussion of global warming. Lytle resists pointing out any congruence between the two controversies until his afterword, in part because of his stated strategy of "keeping my own commentary to a minimum." I appreciate his attempt to tell Carson's story primarily from her point of view rather than through a 21st-century lens; still, I would have valued more explicit analysis from this competent environmental historian on both the modern ramifications of Carson's pesticide research and our era's strikingly analogous ecological crisis. Lytle provides an engaging backstory to Carson's better chronicled later years. He treats her sense of obligation to her mother, who was in failing health, and to an abandoned grand-nephew—and how such caregiving at times tempered her ability to research and write. He also covers her difficulty gaining respect as a woman in the male-dominated field of science, and her struggle to write accessibly about the complexities of natural science without making errors or oversimplifying and also without subtracting from the wonder and mystery of her subject. While the early parts of Lytle's account at times bog down in the details of Carson's first three books (about the ocean), they offer a clear sense of her growth from someone who simply loved nature to someone who passionately defended its integrity.

Lytle's greatest contribution is letting Carson speak for herself. Her words are so germane to our ecological situation—and so indicting of people, like me, who quickly turn to biocidal substances to make life easier—that they require very little commentary. "We haven't become mature enough to think of ourselves as only a tiny part of a vast and incredible universe," she said in a television broadcast after *Silent Spring* was published. "I think we're challenged as mankind has never been challenged before, to prove our maturity and our mastery not of nature, but of ourselves."