

Green Scene: Appreciating Rachel Carson

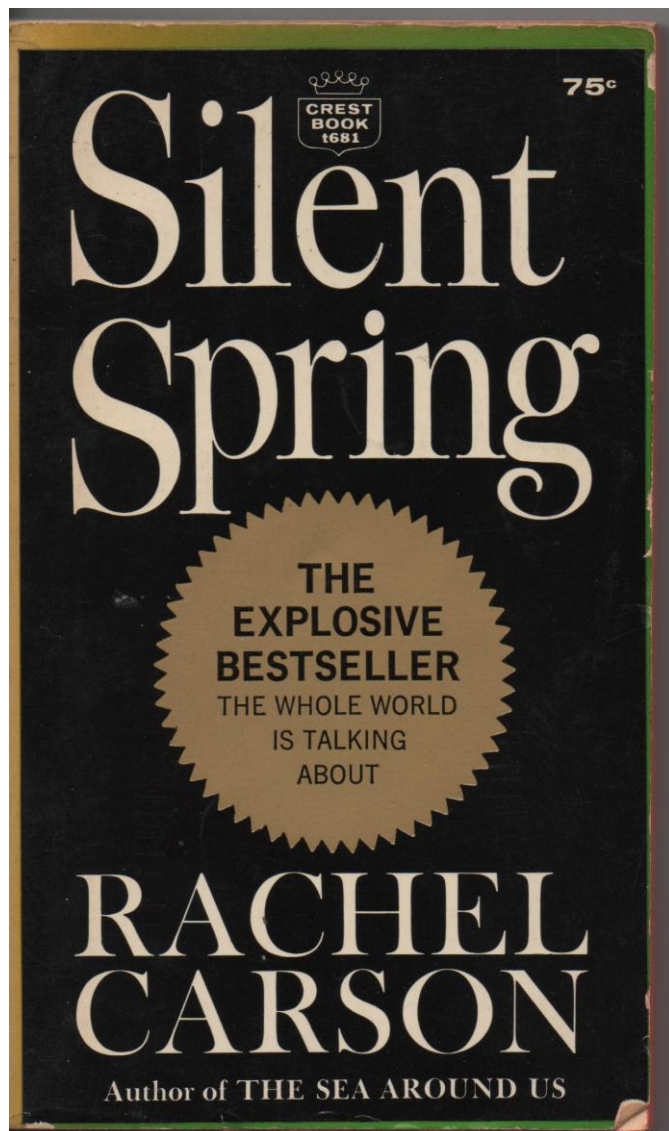
by Elaine Golds

(published by the *TriCity News* - November 30, 2012)

I would be remiss to let this year slip by without noting the 50th anniversary of the publication of a book which caused reverberations around the world. The book was *Silent Spring* by Rachel Carson who is widely credited with starting the environmental movement in North America. In her well-documented book, Carson described the deadly impacts pesticides such as DDT were having on many species of wildlife, mainly birds. Her book was an ardent but sensible call for a much more restrained use of these chemicals.

Silent Spring, considered by many to be one of the best science books ever written, was Rachel Carson's final book.

But who was Rachel Carson? *Silent Spring* was not her first book and, had she had not died of cancer a mere two years after it was published (when she was still battling with her critics in the chemical industry), it is highly unlikely it would be her last. Born in 1907, Carson was the youngest of three children in a family which always struggled financially to meet their needs. Carson displayed an early talent for writing and had a great love of nature. With the help of a scholarship, she attended college but graduated with debts. Despite this, she entered graduate school at prestigious Johns Hopkins University in Baltimore. She spent the summer before graduate school at the world-famous Marine Biological Laboratory in Woods Hole, Massachusetts. It was Carson's first encounter with the ocean and she was totally entranced. Set on a narrow peninsula in Cape Cod where the ocean is never far away, the Marine Lab is a spectacular place where research which exudes a reverence for the ocean has been conducted by first-rate scientists since 1888.



Sadly, Carson never obtained a Ph.D. from Johns Hopkins. Forced by the need to support her widowed mother, a divorced sister, two nieces and, later, a grand-nephew, Carson turned to teaching lab courses. In 1935, she was hired by the Bureau of Fisheries to write brochures and prepare reports on research activities. Her superb writing skills did not go unnoticed. One of her supervisors complained her brochure on the sea was far too good for a mere government publication and suggested she submit it to the *Atlantic Monthly* magazine where it was published in 1937. By 1941, Carson's first book, *Under Sea Wind*, was released. However, the appearance of this book was eclipsed by the entrance of the USA into World War II so it failed to receive much attention initially. From its descriptions of tiny ctenophores to large swordfish, the book was an evocative portrayal of the fish and wildlife species which lived in the Atlantic Ocean complete with a helpful glossary and illustrations.

Carson's understanding of ecology was always rigorous and her descriptions of the complex food chains which sustain biodiversity verged on the poetic. Her next two books, *The Sea Around Us* (1950) and *The Edge of the Sea* (1955) were instant hits. First serialized in the *New Yorker* magazine, both books quickly rose to the best seller list. Carson was able to quit her day job to write full time. Though now somewhat outdated by more recent research, these two books remain as excellent introductions to oceanography and coastal ecology at the Atlantic shore. Carson excelled at describing the connections which inextricably bind ecosystems together whether it be the tiny creatures which inhabit tide pools or the long migrations undertaken by shorebirds and eels. With her consummate understanding of the interconnectedness of all life, she was well-placed to be able to describe how chemical contaminants could move through food chains.

The era of the 1950s was a time when advertising commonly promoted "better living through chemistry". Nature was merely a force to be harnessed to generate economic benefits for mankind. The cold war was in full swing; nuclear bomb testing was commonplace. For example, between 1951 and 1955, 49 above-ground nuclear bomb tests were conducted in Nevada only 63 miles north of Las Vegas which possibly made life in Vegas a bit more of a gamble than it is now. Rising levels of radioactive strontium 90 in milk were of growing concern. Across North America, DDT and other pesticides were being used at ever-increasing levels to control insect pests. With 5% of the land area of the USA treated by aerial DDT spraying in an average year, 75% of its wildlife now had DDT residues in their bodies and some birds were failing to breed. Salmon in rivers were being killed in efforts to control budworm outbreaks in forests.

Although other scientists had been raising concerns about pesticide use, Carson's book *Silent Spring*, released in October 1962, was the first to present such an excellent and easily-understood summary of the facts along with a passionate but accurate description of how wildlife and people were affected.

As they say, the rest is history.

As for me, I can attest that my purchase of her book was the best 75 cents I have ever spent.