

For Love of this World
Sunday May 17, 2015

When I was a child, every year around this time my sister and I looked forward to a holiday that no one but our family and the family across the street celebrated: Fog Day. Technically we should have called it Fog Days, for it marked the two days, about a week apart, when our families would take turns having our houses sprayed with insecticide. The sprayers would come in early in the morning to treat the house; then it needed to be closed up for 12 hours. So on the day that our house was fogged, we would go across to the Wiles' house for breakfast; their son Billy and I would head off to school; we would come back to their house for lunch and again after school where both our families – my parents, sister, grandfather, and I, and the parents, grandparents, and son of that family, plus our dogs and cats, would enjoy dinner and the evening together. My sister and I and Billy all enjoyed the break in routine, and for my sister and me, especially, it was a chance to eat less healthful treats than our mother allowed. At some point, my mother and father would go back to our house to air it out and wipe up the white dust which collected on all the furniture, including the bookcase with a copy of *Silent Spring* on the lowest shelf. Around 8 or so – late for a school night, we would all return to our guaranteed bug-free house. And then, the next week perhaps, we would host the Wiles when their house was treated. Certainly the children never wondered about the effects of the insecticide. I don't know when our parents began to worry, but at some point this tradition ended – perhaps around 1972 when DDT was officially banned for home use in the United States.

In later years, before she died of her third bout of cancer in 1998, my mother used to wonder if the fact that four of the five of us in our household plus our dog experienced different types of cancer could be linked to those Fog Days.

Fortunately, my family's story is not typical and that is in large part thanks to the insight, eloquence, persistence, and courage of one woman: Rachel Carson. Her poetic and scientific consideration of the effects of pesticide use directly led to restrictions on it and to the rise of our modern environmental movement.

Rachel Carson didn't set out to write polemics, but she always loved the outdoor world and she always wanted to be a writer. Carson was born in 1907. As a child growing up on a small farm in Pennsylvania, she spent her free time reading and wandering the land, studying the animals and birds. One of her schoolmates remembered that Rachel's mother woke her every morning at daybreak to hear the birds sing and that Rachel would say goodbye to the birds when she left for school. When she was 11, Rachel Carson published her first story in a children's literary magazine. Over the next few years, the magazine accepted and published several more of her stories.

Her family did not have money to send her to college. Carson won a partial scholarship to Pennsylvania College for Women, now Chatham College, and her parents sold off land and even their china to help pay the remaining costs. When those resources were exhausted, they gave the mortgage on their house to the college. Rachel Carson entered college thinking she wanted to study literature, but in her sophomore year she took a biology class with a dynamic and demanding teacher who changed Carson's life – and perhaps our world. One of Carson's

biographers wrote: this professor “taught that all life was interconnected, and seen in the light of evolution this meant, as Carson came to realize, that every day in the world offered evidence of all the years of the world that had come before. [This professor] saw extinction as an inevitable aspect of evolution, and she was alert to the fact that human carelessness about the environment could sometimes hasten the disappearance of species that might not otherwise be endangered. This holistic view of the living world – and our place in it – was already being called ‘ecology.’”

It was hard for women to pursue careers in science but with the assistance of her professor who had left to work not far from us at Woods Hole Oceanographic Institute, Carson got an internship there for two summers and through that experience was awarded a full scholarship to do graduate work at Johns Hopkins University. The summers at Woods Hole were her first experience at the ocean. She learned to swim and discovered her life-long passion for tide-pools. Out on a boat on collecting trips, she wrote later that she allowed her thoughts to “go down through the water,” so that what was unseen below gradually came clear to her and she could at last “see the whole life of those creatures as they lived them in that strange sea world.” She was beginning to combine her writer’s imagination with her scientific study.

Her father had died, and she was now supporting her mother, her older sister, who was divorced, and her two nieces on her stipends as a lab assistant and a TA. She completed her master’s degree and began working on a Ph.D. which she never completed. She needed money more than the degree. She taught at Hopkins and another college for a couple of years and then in the middle of the Depression took the civil service exams and was hired as a field aide for the Bureau of Fisheries. There she began the work which would result nearly 30 years later in *Silent Spring*: writing about the natural world. At first she wrote scripts for a radio program called *Romance under the Waters* which was broadcast over CBS radio. She also began writing articles for the local Sunday papers and then in 1937 the prestigious *Atlantic Monthly* magazine accepted her essay “Undersea.” Both for the Bureau of Fisheries and in the newspapers and magazines, she was listed as “R.L. Carson” because she thought that having readers assume she was a man would make her more credible. Her writing all combined scrupulous research, often through correspondence with experts around the country and in Europe, and a poetic use of language. The Atlantic article was well-received and led to a contract for her first book, *Under the Sea-Wind*, which described the lives of sea-birds and fish as if through their own lives. Though well reviewed, it didn’t sell many copies, perhaps because it came out just before Pearl Harbor Day in 1941. During the War, Carson continued to work for what was now the Fish and Wildlife Service. Among her responsibilities was explaining newly established wildlife refuges to the general public. In 1946 she came up to Massachusetts to Newburyport to learn about the Parker River Refuge which was so controversial that she and the photographer who accompanied her were warned that they might be shot. The pamphlet she wrote showed her belief that conservation work could bring people together for common goals: she explained that the refuge was actually good for duck hunters, who were

among the strongest protesters, for though they couldn't hunt in the refuge, because of the refuge the duck population was increasing, and they could be hunted outside the refuge. In the final pamphlet in the series, she wrote, "For all the people, the preservation of wildlife and of wildlife habitat means also the preservation of the basic resources of the earth, which men, as well as animals, must have in order to live. Wildlife, water, forests, grasslands – all are parts of man's essential environment; the conservation and effective use of one is impossible except as the others are also conserved."

In 1947 Carson visited Maine for the first time, staying outside of Boothbay Harbor. She wrote to a friend that if she could figure out how to afford it, she'd spend the rest of her life there. After the publication of her second book, *The Sea around Us*, which was on the New York Times bestseller list, for 86 weeks, Carson finally had the resources to buy land on Southport Island and build a summer cottage. She also was able to leave the Fish and Wildlife Service to write full time. *The Sea around Us* could best be described as a biography of the ocean. *The New Yorker Magazine* which serialized 10 of the chapters published them as a Profile – something they'd never done before for a non-human being. But the sea came alive in Carson's prose, from its primeval beginnings to the latest scientific understandings; from its depths to its tide pools. And the biography included too descriptions of the difference human beings had made in the life of the sea and the land. One passage describes how things change when human beings arrive at a previously uninhabited island:

Most of man's habitual tampering with nature's balance by introducing exotic species has been done in ignorance of the fatal chain of events that would follow. But in modern times, at least, we might profit by history. About the year 1513, the Portuguese introduced goats on the recently discovered island of St. Helena, which had developed a magnificent forest of gumwood, ebony, and brazilwood. By 1560 or thereabouts, the goats had so multiplied that they wandered over the island by the thousand, in flocks a mile long. They trampled the young trees and ate the seedlings. By this time the colonists had begun to cut and burn the forests, so it is hard to say whether men or goats were the more responsible for the destruction. But of the result there was no doubt. By the early 1800s the forests were gone.

She also included information on the earth's warming, noticeable even then, with rising sea levels, melting glaciers, and shrinking sea ice in the Arctic. If things did not change, she predicted, "most of the Atlantic seaboard, with its cities and towns, would be submerged[, and] the surf would break against the foothills of the Appalachians."

So how did Rachel Carson move from poetry to taking on the pesticide industrial complex? During the Second World War, scientists were working on chemical weapons and tested them on insects. After the war, it seemed logical to use them on insects. With the rise of single crop large farms, the natural pesticides of

the past weren't strong enough. These new chemicals could – eradicate pests from crops, homes, and suburban tree-shaded streets. In 1959 alone Americans used 80 million pounds of DDT, often in strengths many times the recommended use. Studies of the effect of DDT and other pesticides had all focused on birds and animals in low doses. No one had studied the effect of the larger doses or what these might mean for human development. But even the low doses had concerning results – in one study of spraying for gypsy moths, 83 percent of the bird population was wiped out in two weeks. When the city of Princeton, NJ, sprayed to get rid of Dutch elm disease, a quantity of DDT approved for an entire acre of forest was sprayed on each tree. Almost immediately residents began to complain of birds dropping dead on their lawns. Two years later they sprayed again, still in the same quantity, but now any birds were hard to find. Some people argued though that the birds had simply left the area, not been decimated by the spraying.

Rachel Carson had written early pamphlets for the Fish and Wildlife bureau on the proper use of pesticides and had been aware ever since of their possible effects. As they began being sprayed more widely, she began clipping articles from newspapers and magazines on their use and their consequences. She wrote to E.B. White to suggest that he should write an article on this subject. White wrote back that he was concerned about this issue too, especially that no one ever considered the needs of the earth itself, but he thought that she was the one to write on this issue. Carson agreed.

It took her almost four years to write *Silent Spring*. There was a lot of research involved, and Carson was meticulous in her research, in part because she knew she would be attacked for this book and would need to justify every thesis and conclusion. She revised the format several times to frame it in a way which would convey the science to the general public. And she was diagnosed with breast cancer during the writing of the book; after surgery, she was not told, as she should have been, that she needed radiation, and the cancer spread, eventually killing her in 1964. She also was raising her young grand-nephew after the death of his mother.

Finally in 1962 *Silent Spring* was published. Carson opened by stating the dangers she would lay out:

The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers, and sea with dangerous and even lethal materials. This pollution is for the most part irrecoverable; the chain of evil it initiates not only in the world that must support life but in living tissues is for the most part irreversible. In this now universal contamination of the environment, chemicals are the sinister and little-recognized partners of radiation in changing the very nature of the world – the very nature of its life. Strontium 90, released through nuclear explosions into the air, comes to earth in rain or drifts down as fallout, lodges in soil, enters into the grass or corn or wheat grown there, and in time takes up its abode in the bones of a human being, there to remain until his death. Similarly, chemicals sprayed

on croplands or forests or gardens lie long in the soil, entering into living organisms, passing from one to another in a chain of poisoning and death.

Monsanto and other pesticide makers immediately attacked her science and her integrity. Government agencies who worked closely – too closely – with the pesticide industry also dismissed her findings – until the public outcry and outrage became so strong that President Kennedy agreed to appoint a committee to study and make recommendations on the issues raised by “Miss Carson’s book.” But Carson as always was trying to bring groups together for the good of the earth – she did not argue that pesticides should never be used, but that their use and their consequences should be evaluated in light of the good of all species and of the environment. Even though she died only two years after the publication of the book, she knew when she died that her words had helped to protect the land and its animals and plants, the sea and its fish, the air and its birds.

All this good came from Rachel Carson’s deep love of the earth. That love flowed into study, and that study, combined with her beautiful prose, flowed into action which then influenced others to act. But it all came from her love of this world. Rachel Carson was not a conventionally religious person. Late in life she discovered Unitarian Universalism and she found support as she was dying from Duncan Howlett, the minister of All Souls Church in New York. She did not believe in a God beyond the universe, but found the divine in the wonder of the natural world. She saw her work as helping others to feel this reverence for the earth and to recognize with humility that we are part of the universe, not masters or the center of it.

Today many Christian churches are celebrating Ascension Day. Though our tradition no longer celebrates this holy day as we used to, it was once more important than Easter in Universalist churches. Ascension Day remembers the story in the book of *Acts* that after Jesus was killed, he walked and taught and ate with his friends for 40 days, and then was lifted up into heaven. Afterwards, as his disciples stood with their mouths open watching the clouds, two men in white appeared and said to them, “Why are you looking at the heavens?” Our tradition picked up on that question – for us religion is not about looking to another world but immersing ourselves in this one. We do this in many ways – following Rachel Carson’s example in working for climate justice, partnering with those in the Black Lives Matter movement for racial justice; considering the connections between how and where we spend our money and economic justice. All of these come from the spiritual discipline of seeing, loving, and reverencing this world, this life. Though we will of course show that that discipline differently in each of our lives, this is what our faith calls us to do: to “open our eyes to unnoticed beauty” and to reverence what we see with our eyes and with our arms, with our lips and with our lives.

- Pamela M. Barz

Readings for *For Love of this World*

Today by Billy Collins

If ever there were a spring day so perfect,
so uplifted by a warm intermittent breeze

that it made you want to throw
open all the windows in the house

and unlatch the door to the canary's cage,
indeed, rip the little door from its jamb,

a day when the cool brick paths
and the garden bursting with peonies

seemed so etched in sunlight
that you felt like taking

a hammer to the glass paperweight
on the living room end table,

releasing the inhabitants
from their snow-covered cottage

so they could walk out,
holding hands and squinting

into this larger dome of blue and white,
well, today is just that kind of day.

From *Help Your Child to Wonder* by Rachel Carson, *Woman's Home Companion Magazine*, July 1956

For most of us, knowledge of our world comes largely through sight, yet we look about with such unseeing eyes that we are partially blind. One way to open your eyes to unnoticed beauty is to ask yourself, 'What if I had never seen this before? What if I knew I would never see it again?'

I remember a summer night when such a thought came to me strongly. It was a clear night without a moon. With a friend, I went out on a flat headland that is almost a tiny island, being all but surrounded by the waters of the bay. There the horizons are remote and distant rims on the edge of space. We lay and look up at the sky and the millions of stars that blazed in darkness. The night was so still that we could hear the buoy on the ledges out beyond the mouth of the bay. Once or twice a word spoken by someone on the far shore was carried across on the clear air. A few lights burned in the cottages. Otherwise there was no reminder of other human life; my companion and I were alone with the stars. I have never seen them more beautiful: the misty river of the Milky Way flowing across the sky, the patterns of the constellations standing out bright and clear, a blazing planet low on the horizon. Once or twice a meteor burned its way into the earth's atmosphere.

It occurred to me that if this were a sight that could be seen only once in a century or even once in a human generation, this little headland would be thronged with spectators. But it can be seen many scores of nights in any year, and so the lights burned in the cottages and the inhabitants probably gave not a thought to the beauty overhead; and because they could see it almost any night they will never see it.