

*"I am pessimistic about the human race because it is too ingenious for its own good. Our approach to nature is to beat it into submission. We would stand a better chance of survival if we accommodated ourselves to this planet and viewed it appreciatively, instead of skeptically and dictatorially."* - E.B. White

Our message today is focused on a writer a scientist an environmentalist. Our message today is focused on a woman who changed our lives, our way of living, our nation, and our world. Our message today is focused on Rachel Carson.

Our talk today is called "A Sense of Wonder" because that is how Rachel Carson lived her life, in awe of the natural world around us. Last Wednesday marked the 57th anniversary of her death. This coming Thursday, April 22nd will be the 51st anniversary of Earth Day.

So today, we gather to celebrate and honor them both. Rachel Carson was born in 1907. Rachel's story starts with her mother. Rachel's mother was a teacher before becoming a wife and a mother, Even though the children went to school - their mother taught them at home as well. Rachel said her mother taught her the names of all the flowers and the songs of all the birds before teaching her to read and write. Before she even began her formal education at elementary school.

I like this part of Rachel's story, because it is my own mother who introduced me to Rachel Carson and her amazing influences on our world. It is remarkable because nature and writing would be something she continued for the rest of her life, probably every single day.

She loved writing and never considered being anything else other than a writer. Early in life she was writing stories and drawing pictures about animals, imagining what their lives were like.

On a side note: Not surprisingly, one of her own favorite authors was Beatrix Potter - a unitarian author who illustrated for scientists before writing children's books - but we will save that for another day.

Back to Rachel - She was known to be shy and quiet - as a child, but also throughout her life - preferring to observe and record rather than speak out. Writing gave a voice and a way to express herself. The first time one of her stories was published, she was only 10 years old. She was always top of her class and showed an aptitude and appetite for learning.

Rachel's family had little means, but her mother was determined her daughter go to college after high school, a rare opportunity for a Pennsylvania farm girl in 1925. Of course she studied writing and literature and worked towards her English degree. However, she needed a science credit for that degree. When she took her biology class, everything changed - She looked through a microscope and saw a small world in a drop of water: Tiny sea plants and animals. She was amazed, she was in love, and she wanted to learn more. Science engaged her mind, she changed her major - and found biology "gave her something to write about". Rachel graduated from Pennsylvania College for Women (now Chatham University) in 1929, studied at the Woods Hole Marine Biological Laboratory, and received her MA in zoology from Johns Hopkins University in 1932.

There were not many opportunities for women in science in the 1930's, however - her superstar skills as a researcher and marine biologist combined with her writing talents landed her a job working for Bureau of Fisheries. She wrote a series of radio programs for them based on marine life. She also wrote free lance articles for various publications including *The Baltimore Sun* and *The Atlantic Monthly*. Rachel became known as the writer who made tough scientific topics easy to understand.

She started bringing her articles together into books, publishing her first book in 1941. By 1949, she had worked her way through the ranks at the Bureau of Fisheries and was editor in chief for all of their publications. Reading others' works allowed her to further understand the long history of the earth, in its patterns and rhythms, its ancient seas, its evolving life forms. She was an *ecologist* - fascinated by the intersections and connections but always aware of the whole - before that perspective was accorded scholarly legitimacy.

I firmly believe Rachel Carson is a very strong reason why that perspective gained scholarly legitimacy.

Following WWII, she traveled for her work, continuing to write and fight for conservation - the increased use of DDT and other pesticides are brought to her attention. She began to consult with other scientists and encouraged them to write about their studies. But no one will.

So Carson did.

And no one will publish her articles on this topic. She published her second book in 1950, it is a best seller. She did not like the attention but she did like the paycheck, she was able to quit her job at the Bureau and is honored with awards for writing and science. She continued to write, to study, to observe, and to record.

Meanwhile, chemicals and pesticides developed for war time use were being widely sold to American homes and farms to kill insects and weeds. For years the dissemination of these toxic chemicals went unchecked. Carson became concerned technology was moving faster than humankind's sense of moral responsibility.

Her 3rd book published in 1953 focused on the sea as the two before it, and was also a best seller. But there was something Carson wanted to write about and publish that no one else would: by 1957 she was convinced DDT and other long-lasting agricultural pesticides were harmful to the whole biota, the whole "stream of life" if you will.

There was no environmental movement.

There were no major laws governing chemical pesticides.

There was no governmental agency charged to look out for the air we breathe and the water we drink.

There was no national debates about our impact on this earth or the sky above us.

Many universities were studying effects of the pesticides. One study, by MSU was actually done right on their campus studying the effects of DDT on the Dutch Elm Trees. It's said 2-6 pounds of pesticide was sprayed on each tree to prevent dutch elm disease. Which it did. The leaves, coated in the poison, would then drop to the ground in the fall and biodegrade. However, the DDT did not biodegrade and the earth worms ate it. Many of the worms died, but some built a resistance to it and ingested the DDT all winter long. The robins returned and ate the worms. The study says a robin could eat about 11 DDT worms before it died. 11 worms, in about as many minutes. But some of the robins actually built resistance themselves and did not die, and were able to lay eggs. Most of those eggs were not viable. The shells too thin to protect their fragile cargo. If, by some rare chance the eggs did produce living offspring, those offspring could not reproduce.

Carson wrote to a friend "There would be no peace for me, if I kept silent"

She was successful enough in her writing that she no longer needed support and approval from *Reader's Digest* or *Time Magazine*. In 1962 she released a book that woke us up, opened our eyes, and challenged us to save this planet we call home. Challenged us to save ourselves.

Carson's book was called "*A Silent Spring*" but it was not silent. Her message was heard like a clap of thunder - it was an abracing and alarming account of America's use of pesticides following WWII. She showed us the harm these chemicals were doing to our health and our world - calling not to stop using them but to regulate them. The book quickly became a best seller, and the industry was just a quick to take down the woman who wrote it.

Her book honestly addressed the issues of chemical contamination and plunged her into controversy and a war with the chemical and agricultural industries. Hundreds of thousands of dollars were spent to discredit the book and its author: *a hysterical female calling herself a scientist? Everyone knows women can't be*

*real scientists. She was a “bird and bunny lover” - “a spinster” - she kept cats and was therefore clearly suspect.*

The attack back-fired: The publicity it created actually helped *A Silent Spring* become a world-wide best seller. Carson said the quarter million dollars spent on dis-crediting her book promoted it more than her publisher ever could have.

She stood her ground. And she was heard and the modern environmental movement was born.

- JFK’s President’s Science Advisory Committee issues reported on the use of pesticides
- The FDA took on tighter drug regulations
- Finally, other scientists and biologists who refused to help Carson in the past stand up for her and support her

For most of 1963 Carson addressed groups all over, including

- attending federal hearings
- fighting for the Clean Air Act and the Wilderness Preservation System
- testifying before the U.S. Senate Committee on Government Operations
- calling for a limit to the number of pesticides in use
- testifying before the U.S. Senate Commerce Committee

Carson found this battle and popularity exhausting. Also exhausting: only those closest to her know she is also fighting her own battle, she is fighting cancer.

Her battle with cancer is one she lost in April of 1964.

But I think we can call her battle for the environment, a win. Even though it is a battle which still continues.

No longer deemed a crazy cat lady spinster, she is crowned

- a witness for Nature
- pioneer of ecology

- the earth's protector
- the Mother of the Environmental Movement

*A Silent Spring* called "a seminal environmental text". Former US Vice President and environmentalist Al Gore writing "*Without this book, the environmental movement might have been long delayed or never have developed at all.*"

Within a decade of her death,

- The Clean Air Act is passed
- The EPA is formed
- National Historic Preservation Act
- The Endangered Species Act
- The Environmental Defense Fund established
- and more.... including the first Earth Day on April 22nd 1970

For many of us pagans, hippies, dirt-worshippers, tree-huggers we have truly embraced the phrase "*Earth Day, Every Day*" but the path can be frustrating and disappointing. In spite of decades of environmental protest and awareness, and in spite of Rachel Carson's apocalyptic call alerting Americans and the world to the problem of toxic chemicals, reduction of the use of pesticides has been one of the major policy failures of the environmental era. Global contamination is a fact of modern life.

Unitarian Universalist (UU) congregations together affirm and promote seven Principles. Our 7th Principle: Respect for the Interdependent Web of All Existence of Which We Are a Part - while this principle is about much more than environmentalism - the environment is definitely a factor.

In 1989 the UUA created the *Green Sanctuary program*: a path for congregational study, reflection, and action in response to environmental challenges. From the UUA's Green Sanctuary 2030 Campaign: Mobilizing Climate Justice: "The climate-change crisis with Global Warming is the existential threat to the human species and the web of life. It is the urgent, overarching survival and justice issue of our time, calling us to impactful action now. In an era in which the call to dismantle

racism could not be more clear, and when the COVID 19 pandemic stunningly highlights that systemic racism is inextricably bound to climate degradation and injustice, Unitarian Universalist Faithful Response calls us to bring our individual and collective gifts together to act with bold, inspiring, collaborative, networked, and effective leadership to ensure a livable world for all descendants and create climate justice with those who are systemically oppressed.”

Unlike EB White who I quoted at the beginning of this piece, Carson and the UUA want us not to lament the dark side of human nature, but to relish the promise of life’s possibility.

*“A child’s world is fresh and new and beautiful, full of wonder and excitement. It is our misfortune that for most of us that clear-eyed vision, that true instinct for what is beautiful and awe-inspiring, is dimmed and even lost before we reach adulthood. If I had influence with the good fairy who is supposed to preside over the christening of all children, I should ask that her gift to each child in the world be a sense of wonder so indestructible that it would last throughout life, as an unailing antidote against the boredom and disenchantment of later years... the alienation from the sources of our strength.” - Rachel Carson, *The Sense of Wonder**