### Silent No More:

# How Rachel Carson's Silent Spring Unleashed the Frontier of Environmentalism

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Paper: 2,148 words

Process Paper: 500 words

#### **Process Paper**

I've always been interested in the environment. I've organized a climate strike through a youth environmental organization, and I hope to study environmental engineering in college. As I read the news one day, I noticed a panoply of headlines about an Ohio chemical spill. That reminded me of the pollution crisis in Wilmington, my hometown, where chemicals were leached into our water by companies up the Cape Fear River. I'd studied Rachel Carson in U.S. history, and as I thought about these occurrences, the idea to research her came to me. Rachel Carson and *Silent Spring* relate to the topic of frontiers in history in three major ways. Firstly, Carson was a pioneer for female professionals, overcoming sexist criticism to become a widely-respected scientific author. Secondly, Carson highlighted how some frontiers were expanding too quickly, uncovering the danger of innovations in the technological field and leading to a robust system of checks on new creations. And lastly but most importantly, Carson's book led to the revival of environmentalism, a history-changing movement that continues to grow.

To conduct my research, I read and took notes on numerous articles that broadly summarized the story of Rachel Carson and *Silent Spring*. I then used primary sources and key people referenced in those articles to dig deeper. I found several primary sources that furthered my research, such as reviews about *Silent Spring*. In an attempt to reduce any inherent bias I have due to my modern perspective, I didn't read *Silent Spring* until I'd done thorough research about its initial reception. After reading it, I utilized my newfound appreciation for the lyrical prose of the book to revise my essay. After the local and state competitions, I investigated more and applied judges' feedback to improve the essay.

I'd made sure to organize my research into an outline as I gathered it, so when it came time to actually write, it was straightforward. I took the quotes I'd collected, fit them into my outline, and began to write. Once I finished the rough draft and editing, I learned how to create footnotes, then entered those. I'd previously competed in the National History Day documentary category, so compared to the labor necessary for that, this essay was less complicated.

My historical argument is that Rachel Carson's *Silent Spring* altered the course of history by focusing public attention on the wrongs of big corporations, thus giving birth to an influential wave of environmentalism. As I show in my essay, Rachel Carson's book created environmentalism, which has had wide and indelible impacts. In a time when few considered humans at the mercy of nature, Carson showed the nation and world that our actions negatively impact the ecosystem, jeopardizing humanity and everything around us. She changed the way we thought about our relationship with Earth, ushering in an era of remarkable reform that protected our species and planet. She was the mother of environmentalism, a cause that's thriving sixty years later as one of the largest worldwide movements.

#### **Silent No More**

"Every once in a while in the history of mankind, a book has appeared which has substantially altered the course of history."<sup>1</sup>

Historically speaking, writing has been of unfathomable importance when expanding into new frontiers. Before our nation was even born, revolutionaries such as Thomas Paine were looking to the unexplored boundary of democracy, writing compelling literary pamphlets such as Common Sense. Less than a century later, Harriet Beecher Stowe pushed conversations to a breaking point with the heart-wrenching *Uncle Tom's Cabin*, which became a catalyst for one of America's bloodiest wars and, eventually, reform.<sup>2</sup> Moving into the twentieth century, muckraker Upton Sinclair unveiled the previously overlooked terrors of unregulated capitalism with his work *The Jungle*, an exposé that revealed the horrifying secrets of the nation's meat-packing industry. But, by the 1960s, the country was about to experience another earth-shattering book, one that would mix the unrestrained honesty of Sinclair with the raw compassion of Stowe and the call to action of Paine. The work would check unrestrained, wild frontiers. It would empower female scientists around the globe. It would introduce critical concepts to the human race, forever leaving humanity to think along new and unfamiliar lines. This book, penned by Rachel Carson, would be known as *Silent Spring*.

In the years following World War II, scientific technologies that rapidly developed during the conflict were pivoted for public use. One of these technologies was the pesticide

<sup>&</sup>lt;sup>1</sup> Senator Ernest Gruening to Rachel Carson following the publication of *Silent Spring*. Griswold, Eliza. "How 'Silent Spring' Ignited the Environmental Movement." The New York Times, 21 Sept. 2012, https://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html.

<sup>&</sup>lt;sup>2</sup> Natural Resources Defense Council, Inc. "The Story of Silent Spring." Nrdc, 13 Aug. 2015, https://www.nrdc.org/stories/story-silent-spring.

dichloro-diphenyl-trichloroethane, or DDT, which was invented during the war to kill malaria-transmitting insects on South Pacific islands. Upon its release, the compound was seen as a miracle, and in the rushed wave to create household uses for military technologies, it became available to civilians in 1945. The pesticide was used as an agricultural aerial spray and included as an ingredient in many insecticidal wallpapers and paints. This newfound compound was highly lauded, and its inventor even won a Nobel Prize for its creation. Few recognized a problem with the technology, but one woman was about to shatter that perspective.

A myriad of factors placed Rachel Carson in the perfect position to shake the status quo. Born in rural Springdale, Pennsylvania in 1907, Carson experienced nature and its beauty firsthand on a daily basis. She was an avid reader and poet, with extraordinary writing abilities that were perhaps only rivaled by her aptitude for the sciences. A bright student, she attended the Pennsylvania College for Women<sup>3</sup> and then obtained a master's in zoology from Johns Hopkins University in 1932.<sup>4</sup> After finishing her education, she worked as a marine biologist for the U.S. Fish and Wildlife Service, eventually writing several books, including the best-seller *The Sea Around Us*. This work, published in 1951, propelled her into the national spotlight for the first time, winning her the National Book Award for Nonfiction. Upon accepting the award, Carson stated:

<sup>&</sup>lt;sup>3</sup> Now known as Chatham University.

<sup>&</sup>lt;sup>4</sup> While a female student obtaining a master's may seem commonplace in today's world, in 1932, this was incredibly rare. For context, in the 40 year period from 1900 to 1940, only about 10,000 women earned this degree nationwide, across all fields.

Nash, Margaret, and Lisa Romero. "'Citizenship for the College Girl': Challenges and Opportunities in Higher Education for Women in the United States in the 1930s." *Research Gate*, Teachers College Record, Feb. 2012, p. 5, https://www.researchgate.net/publication/286376743\_Citizenship\_for\_the\_College\_Girl\_Challenges\_and\_Opportunities in Higher Education for Women in the United States in the 1930s.

"Many people have commented with surprise on the fact that a work of science should have a large popular sale. But this notion that 'science' is something that belongs in a separate compartment of its own, apart from everyday life, is one that I should like to challenge." 5

This idea, that science ought to be plainly and candidly explained to the public, was paramount to Carson, and it was in part this value that influenced her to write another, even more renowned book.

Throughout the 1950s, despite its positive public image, DDT was insidiously revealing its effects through a strange but clear pattern: wherever it was sprayed, immense numbers of birds began dying, causing several species, such as the Peregrine Falcon and Bald Eagle, to teeter on the brink of extinction. The chemical fatally attacked the birds' nervous systems and stunted future populations by causing females to lay eggs with weaker shells. These eggs inevitably cracked before the hatchlings were fully developed, thus devastating populations of avians across the country. Carson's close friend, Olga Owens Hutchins, wrote to her in January 1958 that Cape Cod was experiencing yet another massive bird kill. Carson later stated that this letter "brought my attention sharply back to a problem with which I had long been concerned. I then realized I must write this book."

Galvanized by her friend's letter, Carson began work on her magnum opus in 1958. In it, she carefully detailed the effects of DDT: most obviously, how it killed bird populations in droves, but also how the chemical was absorbed by all sorts of animals, such as insects and fish, and accumulated in their fatty tissues. Other animals ate the poisoned species, and the chemical

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<sup>&</sup>lt;sup>5</sup> American Chemical Society. "Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark." *American Chemical Society*, 26 Oct. 2012,

https://www.acs.org/education/whatischemistry/landmarks/rachel-carson-silent-spring.html.

<sup>&</sup>lt;sup>6</sup> *Silent Spring* by Rachel Carson. Crest Books, 1962, page 7. https://library.uniteddiversity.coop/More Books and Reports/Silent Spring-Rachel Carson-1962.pdf.

worked its way up the food chain until humans consumed meat that contained toxic levels of DDT. This meant that after one spray in an environment, DDT entered the ecosystem and remained there for months, eventually reaching humans, resulting in genetic damage and subsequent cancers. Carson employed countless facts and figures in her book, but she didn't stop there. She drew upon her literary skills as well, crafting a harrowing, pathos-filled first chapter, "A Fable for Tomorrow," which depicted a town in the near future where everything was eerily quiet after birds had been exterminated by DDT:

"It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh."<sup>7</sup>

As a reminder of the sickening silence in the hypothetical future, Rachel Carson titled her book Silent Spring. In the summer of 1962, after four years of tireless work, Carson released her book in three sections to *The New Yorker*, later publishing it in its entirety that September.

Upon their official review of Silent Spring, The New York Times predicted: "Few will read [the book] without a chill." They were unequivocally correct. The story rocked the nation, horrifying the public and causing millions to envision the dangers of a chemical about which they hadn't thought twice. But perhaps most shocked by Silent Spring was the group it shamelessly exposed: the chemical industry. Immediate retaliation followed *Silent Spring*'s initial release. The Velsicol Corporation, which produced the chemical chlordane, sent a letter to the publisher Houghton Mifflin forcefully warning the company that they would file a libel suit

<sup>&</sup>lt;sup>7</sup> Ibid, page 10.

<sup>&</sup>lt;sup>8</sup> The New York Times. "Rachel Carson's Warning." The New York Times, 2 July 1962, https://www.nytimes.com/1962/07/02/archives/rachel-carsons-warning.html?url=http%3A%2F%2Ftimesmachine.ny times.com%2Ftimesmachine%2F1962%2F07%2F02%2F82052400.html.

if the book were released. Monsanto, a pesticide company, printed 5,000 copies of a pamphlet titled "The Desolate Year," parodying the first chapter of Silent Spring by depicting a world with no chemical pesticides where everyone starved due to crop failure. Similarly recognizing the importance of public image, the National Agricultural Chemical Association launched a massive \$25,000 public relations campaign in a desperate attempt to pull the average consumer back onto the side of the chemical companies. 9 10 Other corporations took a more dramatic response. The American Cyanamid Company ominously professed: "We'll return to the Dark Ages if we listen to Rachel Carson." Some even went a step further, attacking Carson's identity and sanity. Multiple organizations called her a communist, a potentially career-ending claim at the time. 12 Some media outlets and opponents attempted to paint her as a hysterical woman or overly emotional housewife instead of a professional intellectual. In an issue of Chemical and Engineering News from October 1, 1962, Dr. William J. Darby authored the article "Silence, Miss Carson," wherein he attempted to discredit Carson, stating that because she wasn't directly affiliated with any particular institution at the time she wrote the book, she wasn't a trustworthy source. He declared, "In view of her scientific qualifications in contrast to those of our distinguished scientific leaders and statesmen, this book should be ignored."13

<sup>&</sup>lt;sup>9</sup> This is equivalent to roughly a quarter of a million dollars in 2023.

<sup>&</sup>quot;\$25,000 in  $1962 \rightarrow 2023$ ." Inflation Calculator, https://www.in2013dollars.com/us/inflation/1962?amount=25000. Accessed 26 Feb 2023.

<sup>&</sup>lt;sup>10</sup> Rachel Carson Center for Environment and Society. "Industrial and Agricultural Interests Fight Back." *Environment & Society Portal*, 5 Mar. 2020,

https://www.environmentandsociety.org/exhibitions/rachel-carsons-silent-spring/industrial-and-agricultural-interests-fight-back.

<sup>&</sup>lt;sup>11</sup> Natural Resources Defense Council, Inc. "The Story of Silent Spring." NRDC, 13 Aug. 2015, https://www.nrdc.org/stories/story-silent-spring.

<sup>&</sup>lt;sup>12</sup> Rachel Carson Center for Environment and Society. "The Personal Attacks on Rachel Carson as a Woman Scientist." *Environment & Society Portal*, 5 Mar. 2020, https://www.environmentandsociety.org/exhibitions/rachel-carsons-silent-spring/personal-attacks-rachel-carson-woman-scientist.

<sup>&</sup>lt;sup>13</sup> Darby, William. "Silence, Miss Carson." *Chemical & Engineering News*, Oct. 1962, pp. 62–63.

Unfortunately for Darby, many disagreed. One dissenter was none other than President John F. Kennedy. Carson first caught the eye of Kennedy when she published *The Sea Around Us*, which attracted his attention because of his connection to the east coast as well as his value of conservation. Both Kennedy and Secretary of the Interior Steward L. Udall took Carson and her new release seriously and initiated steps to check the reliability of her information. Kennedy ordered a full review of the work by the President's Science Advisory Committee. Carson was prepared. In her book, she had cited dozens of scientific reports, interviewed leading authorities, included fifty-five pages of notes, and attached a list of experts who had approved the manuscript. The committee's official report completely backed her findings, vindicating Carson and placing her book above the unfounded allegations from the chemical industry.

The years following the landmark publication were anything but silent. Carson's research paved the way for the Kennedy administration to focus on conservation with voters' backing, thus supporting efforts to regulate the companies that had for so long ignored public health in favor of profits. The President's Science Advisory Committee report in 1963 echoed Carson's calls for limits on pesticide use.<sup>14</sup> Even after Carson died from cancer in 1964, change was still transpiring.<sup>15</sup> The stir caused by *Silent Spring* allowed for the creation of the Environmental Protection Agency, an entirely new governmental organization with the sole

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<sup>&</sup>lt;sup>14</sup> American Chemical Society. "Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark." American Chemical Society, 26 Oct. 2012, https://www.acs.org/education/whatischemistry/landmarks/rachel-carson-silent-spring.html.

<sup>&</sup>lt;sup>15</sup> Carson was sick with breast cancer and several other serious illnesses for the majority of the time she worked on the labor-intensive *Silent Spring*.

purpose of preserving nature. And in 1972, the nation instituted a ban on the domestic use of DDT.<sup>16</sup> <sup>17</sup>

But perhaps the most important effect of *Silent Spring* was its influence on public sentiment. Instead of arguing about *whether* pesticides were dangerous, people began to ask *which ones* were harmful. *Silent Spring* unlocked the gates to the frontier of environmental awareness and the conservation movement that is still thriving to this day. Before *Silent Spring*'s publication, the earth was widely considered to be nothing more than a place with infinite resources for the taking. But Carson shocked the population by demonstrating that human actions had real, indelible consequences for our world. She revealed that the planet had a limit to how much abuse it could take, revolutionizing how humans saw themselves in relation to the natural environment. As stated by Editor-in-Chief Rudy M. Baum in the June 4, 2007 edition of *Chemical & Engineering News*:

"At a time when humans largely believed themselves to be apart from nature and destined to control it, Carson argued passionately that nature is, in fact, a network of interconnections and interdependencies and that humans are a part of that network and threaten its cohesion at their own peril." <sup>18</sup>

<sup>&</sup>lt;sup>16</sup> American Chemical Society. "Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark." *American Chemical Society*, 26 Oct. 2012,

https://www.acs.org/education/whatischemistry/landmarks/rachel-carson-silent-spring.html.

<sup>&</sup>lt;sup>17</sup> The World Health Organization later banned the chemical as well, after arguing for years that DDT was the cheapest and most effective prevention for malaria. While there are theories that the WHO likely banned DDT due to mosquitoes gaining resistance against the pesticide rather than in reaction to *Silent Spring*, this doesn't detract from the success brought about by Carson's work. In *Silent Spring*, Carson didn't call for a ban on the chemical- she instead advocated for more investigation to be done before continuing with its use, which was in fact accomplished.

<sup>&</sup>lt;sup>18</sup> This excerpt is especially reflective of a shift in thinking, as it comes from the same magazine that published Darby's acerbic review of Carson's book nearly fifty years earlier.

American Chemical Society. "Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark." *American Chemical Society*, 26 Oct. 2012,

https://www.acs.org/education/whatischemistry/landmarks/rachel-carson-silent-spring.html.

In this way, Rachel Carson's *Silent Spring* altered the course of history by focusing public attention on the wrongs of powerful corporations and giving advent to a new form of environmentalism.

Rachel Carson was at the forefront of several frontiers. As a female scientist and author in the sixties, she challenged gender norms and became a leader in her field, despite experiencing sexism and unfounded criticism. She also acted as the public's guardian, protecting humanity from the growing and dangerous frontier of unregulated technologies. She showed that innovative frontiers, just like physical ones, can be perilous, thus demonstrating the importance of understanding the effects of human creations before releasing them, a lesson still relevant today. But perhaps most importantly, her book opened a new wave in the frontier of environmentalism, ushering in a revived era of preservation and change that is still in full force in the modern world. This frontier is unlike a physical one in that it is limitless; as Carson herself once stated, "Conservation is a cause that has no end." Today, as our planet endures chemical spills, pollution, and a climate crisis, the expanding frontier of environmental activism roars louder than ever before.

<sup>&</sup>lt;sup>19</sup> Stated on December 3, 1963 at the National Audubon Society's award ceremony dinner. Brinkley, Douglas. "Rachel Carson and JFK, an Environmental Tag Team." *Audubon*, 8 May 2012, https://www.audubon.org/magazine/may-june-2012/rachel-carson-and-jfk-environmental-tag-team.

#### **Works Cited**

#### **Primary Sources**

Darby, William. "Silence, Miss Carson." *Chemical & Engineering News*, Oct. 1962, pp. 62–63.

This article was Dr. William J. Darby's critique of *Silent Spring*, "Silence, Miss Carson." Reading through the writing allowed me to better examine counterviews to her writing, as well as the prejudice and condescending sexism that often permeated them. It acts as a primary source because it was written in the same year as Carson's release and acted as a direct response to her writings.

The New York Times. "Rachel Carson's Warning." *The New York Times*, 2 July 1962, https://www.nytimes.com/1962/07/02/archives/rachel-carsons-warning.html.

This archive of the 1962 *New York Times* article reviewing and supporting *Silent Spring* gave me a primary source example of the positive reactions major news outlets at the time had to the writing. It also provided insight into how far-reaching the impact of the novel was.

Carson, Rachel. Chapter VIII: Holograph and Typescript, Corrected. 1960, https://collections.library.yale.edu/catalog/10171148.

This collection of images in Yale University's Beinecke database offered me a peek at some of Carson's early drafts of *Silent Spring*, with annotations, crossed-out phrases, and handwritten edits drawn directly on the typed-out manuscript. These meticulous and wild scribbles helped me envision how much time and effort she poured into drafts of her seminal work.

Carson, Rachel. "How About Citizenship Papers for the Starling?" *Nature Magazine*, June 1939, pp. 317–19, YCAL MSS 46. Yale University Library.

https://collections.library.yale.edu/catalog?op=AND&sort=score+desc%2C+pub\_da

te\_si+desc%2C+title\_si+asc&search\_field=advanced&all\_fields\_advanced=&callNu

mber tesim=%22YCAL+MSS+46%22&commit=SEARCH

This digitized database from Yale University's Beinecke Rare Book Library provided me with images of an early work of hers about the preservation of starlings. Seeing this article showed me how much of an environmentalist Carson was even early in her career, long before *Silent Spring* was created.

Nash, Margaret, and Lisa Romero. "Citizenship for the College Girl': Challenges ainto Opportunities in Higher Education for Women in the United States in the 1930s."

\*Research Gate\*, Teachers College Record, Feb. 2012, p. 5,

https://www.researchgate.net/publication/286376743\_Citizenship\_for\_the\_College\_

Girl\_Challenges\_and\_Opportunities\_in\_Higher\_Education\_for\_Women\_in\_the\_Un ited States in the 1930s.

This study helped me realize how rare it was for women to obtain their master's in 1932. It collected data from primary sources dating from 1929-1940 to obtain its figures.

Silent Spring by Rachel Carson. Crest Books, 1962, https://library.uniteddiversity.coop/More\_Books\_and\_Reports/Silent\_Spring-Rachel \_Carson-1962.pdf.

This PDF led me to a copy of Rachel Carson's *Silent Spring*, which I read excerpts from to better understand my topic. I also gleaned a lot of information and quotes from Carson's introduction to the book, as well as the foreword by the publisher.

"'Silent Spring' Is Now Noisy Summer; Pesticides Industry Up in Arms Over a New Book Rachel Carson Stirs Conflict--Producers Are Crying 'Foul' RACHEL CARSON UPSETS INDUSTRY." *The New York Times*, 22 July 1962, https://www.nytimes.com/1962/07/22/archives/silent-spring-is-now-noisy-summer-pesticides-industry-up-in-arms.html?url=http%3A%2F%2Farch-timesmachine-fe-prd-40741-2-575473780.us-east-1.elb.amazonaws.com%2Ftimesmachine%2F1962%2F07%2F22%2F89508196.html.

This article from *The New York Times* summarized the chemical industry's reaction to *Silent Spring*. Reading through this article, which was written the same year as *Silent Spring's* publication allowed me to better understand both the reactions to the book and the response to those reactions.

#### Secondary Sources

American Chemical Society. "Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark." *American Chemical Society*, 26 Oct. 2012, https://www.acs.org/education/whatischemistry/landmarks/rachel-carson-silent-spring.html.

This article provided interesting and relevant information about Carson's book, as well as several quotes and sources that I used as a jumping-off point for further research.

Brinkley, Douglas. "Rachel Carson and JFK, an Environmental Tag Team." *Audubon*, 8

May 2012,

 $https://www.audubon.org/magazine/may-june-2012/rachel-carson-and-jfk-environm\\ ental-tag-team.$ 

This article from the National Audubon Society explained the partnership between President John Kennedy and Rachel Carson. By learning the myriad of ways that JFK supported Carson's work, I was better able to understand Carson's work as well as the positive reactions to it, and the support behind it that made it successful.

Cox, Caroline. "Pesticides and Birds." *Pesticides and Birds: From DDT to Today's Poisons*,

Journal of Pesticide Reform, 1991,

https://www.eap.mcgill.ca/MagRack/JPR/JPR 14.htm.

This webpage covered which particular species of birds were affected by DDT and how it almost led to the extinction of bald eagles and peregrine falcons.

#### Ehrlich, Paul, et al. "DDT and Birds." Stanford University, 1988,

https://web.stanford.edu/group/stanfordbirds/text/essays/DDT\_and\_Birds.html.

This website explained the effects that DDT had on birds. Though I normally wouldn't utilize a website this dated, I found that examining science and reactions to Carson's book closer to the time period was actually helpful. Upon reading the article, I was familiar with reactions *during* the time of publishing and in the modern day, but it was interesting to see reactions between those two time periods, around twenty years later.

Lear, Linda. Rachel Carson: Witness for Nature. Houghton Mifflin Harcourt, 2009, p. 419.

This text allowed me to further examine positive reactions to Carson's work, this time from Supreme Court Justice William Douglas, who touted the book as one of the most important books in the century on multiple occasions. Understanding that many high-ranking individuals, even conservatives, at the time recognized the importance of the work allowed me to realize how influential *Silent Spring* was.

"Rachel Carson and Silent Spring." Bill of Rights Institute,

https://billofrightsinstitute.org/essays/rachel-carson-and-silent-spring. Accessed 11 Apr. 2023.

This website helped me better understand both Rachel Carson's background, as well as much of the impact it had, especially under the Nixon Administration, with the creation of Earth Day and the EPA.

Rachel Carson Center for Environment and Society. "Industrial and Agricultural Interests

Fight Back." Environment & Society Portal, 5 Mar. 2020,

https://www.environmentandsociety.org/exhibitions/rachel-carsons-silent-spring/ind ustrial-and-agricultural-interests-fight-back.

This page introduced me to several counter-arguments and claims made by chemical companies in response to Carson's book.

Rachel Carson Center for Environment and Society. "The Personal Attacks on Rachel Carson as a Woman Scientist." *Environment & Society Portal*, 5 Mar. 2020,

https://www.environmentandsociety.org/exhibitions/rachel-carsons-silent-spring/per sonal-attacks-rachel-carson-woman-scientist.

This webpage further related personal insults Carson endured as a result of her challenge to industries, which were incredibly interesting to read about and provided a nice background for my paper.

Griswold, Eliza. "How 'Silent Spring' Ignited the Environmental Movement." *The New York Times*, 21 Sept. 2012,

https://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html.

This article explained the impact of Carson's *Silent Spring*, as well as her process and the struggles she endured during her research.

"How Rachel Carson's 'Silent Spring' Awakened the World to Environmental Peril."

History.Com,

https://www.history.com/news/rachel-carson-silent-spring-impact-environmental-m ovement. Accessed 11 Apr. 2023.

This website provided me with information on how Carson advertised her book after its publication. It helped me understand how Carson's calm demeanor carried her message a long way and provided several references to primary sources that I then researched more in-depth for a deeper understanding.

Natural Resources Defense Council, Inc. "The Story of Silent Spring." Nrdc, 13 Aug. 2015, https://www.nrdc.org/stories/story-silent-spring.

This website provided important and broad background about *Silent Spring*. It was a nice overview of the subject and the story-like feel made me realize that I wanted my paper to have a similar flow.

"William Douglas." The First Amendment Encyclopedia,

## https://www.mtsu.edu/first-amendment/article/1328/william-douglas. Accessed 11 Apr. 2023.

This website was unique in that instead of providing me with information to include in my paper, it gave me the impetus to not include some research. This site examines the reputation of Supreme Court Associate Justice William Douglas (who commented positively with extreme gusto on Carson's *Silent Spring*). In addition to being a controversial figure due to his womanizing demeanor, Douglas was also known to have a tendency for exaggeration. This factor, which severely undermines his quote about Carson's book, prevented me from including his thoughts directly in my essay.