

## Video Report #1

The film “American Experience: Rachel Carson” was a documentary on marine biologist, writer and conservationist, the late Rachel Carson. Carson, from a young age, was exposed to education and nature by her mother. Through this nurturing, Carson developed a passion for all things related to education and nature. She began her career as a marine biologist, but she is ultimately remembered for her writings about environmental conservation and research transparency.

Rachel Carson is well known for her “Silent Spring” project. Published in September 1962, her writing details how the excessive use of synthetic pesticides in the twentieth century disrupted the balance of nature and put not only humanity but all life on Earth at risk. Synthetic chemicals such as DDT, short for dichlorodiphenyltrichloroethane, was used indiscriminately during this period. DDT was a synthetic pesticide that was excessively used during and after World War II. DDT was a breakthrough discovery, as it was discovered to be extremely effective in killing pests. Because insect-borne diseases such as typhus and malaria were plaguing humanity during this time, it was very eagerly embraced. The synthetic chemical was sprayed on anything and everything, including humans. DDT was considered revolutionary as it stopped the typhus and malaria epidemics of the twentieth century.

Carson noticed that synthetic pesticides had lasting adverse effects on the ecosystems they were used on. She, motivated by her compassion for nature, challenged the science backing synthetic pesticides in her book, proposing that there wasn't enough research on them to justify their safety and excessive use. Her project

gained significant popularity, which infuriated the pesticide industry. As a result, the industry scrambled to justify the use of their products. They were afraid of losing the fortune generated from their flourishing business. Chemists backing the pesticides also felt the need to justify their position as “Silent Spring” questioned their research and thus challenged their reputation. These industry-backed chemists did not consider researching the long term effects of the chemicals. They tried to solely justify the use of these chemicals by suggesting that the chemicals saved many lives and the risks are necessary to progress. The controversy eventually made its way into government affairs as more adverse effects of these chemicals were exposed. Nonetheless, the industry continued to defend their position.

“Silent Spring” ultimately brought to attention the uncertainties of scientific research in the twentieth century. Utilizing her writing skills and influenced by her love for nature, Rachel Carson challenged the scientific research of pesticides by questioning their destructive properties on the environment. She advocated for research transparency through her project. She believed that communicating scientific research with society was very important as it would inform the public about science’s incertitudes. With the pesticide industry unable to stop Carson’s influence, the concerns of Carson reached the forefront of political concern. The industry was eventually exposed to its greedy and unethical motives, This led to revolutionary changes regarding government involvement in scientific research. Carson’s work showed that science was advancing furiously and the need for government regulation was crucial to prevent atrocities resulting from the uncertainties of science.