Rachel Carson

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Presentation Category: Documentary

New Process Paper:

Our topic is Rachel Carson and her exploration of environmentalism. We chose her because of the significance of her work. Rachel Carson is credited for starting the environmental movement and was the first person to successfully spread the word about the negative impacts human technology had on the environment.

To begin our research, we began by looking for information that allowed us to become familiar with Rachel Carson as a whole. As we continued with our research, we thought that looking into Carson's own research process for *Silent Spring* would be a good way to relate her to the theme of exploration. However, we found that Carson did not do her own research, but used research that other scientists and farmers had already conducted. This was problematic because our connection to exploration through experiment was false. We resolved this issue by focusing more on Carson's exploration of ideas and how her ideas impacted the environmental movement, rather than experimental exploration By changing our focus, we were much more successful and found plenty more information about Carson's impact. Another problem we had was finding enough primary sources. We had originally thought that because Rachel Carson wrote a large variety of articles and books, finding primary sources would not be a problem, but it was more challenging than we had thought. However, those that we did find provided insight into Carson's writing style and background in science. We were also able to find newspaper articles from after *Silent Spring* was published which showed the public reaction to *Silent Spring*.

By evaluating the skills of the people in our group, we chose to do a documentary project. We have access to a professional editing program and one of our group members has the necessary skills to use it. Also, there are lots of photos and videos of Rachel Carson that we can use as footage in our documentary.

Because Carson deeply explored the idea of pesticides in nature and encountered hate after the publication of her book *Silent Spring*, she is an excellent fit for the theme "Exploration, Encounter, Exchange." Chemical industries became infuriated when she brought the problems of pesticides to light and tried to discredit her claims. However, *Silent Spring* continued to have a huge impact on society, causing the government to place restrictions or bans on many dangerous pesticides. Rachel Carson's exploration in the field of pesticides led her to be rightfully known as the "nun of nature." Although this field had been explored before, Carson was able to synthesize previous research about pesticides in her book, *Silent Spring*, in a way that the public could easily grasp. *Silent Spring* brought the pesticide issue into light for the first time and inspired people to make a change.

Annotated Bibliography:

PRIMARY SOURCES

Carson, Rachel. "AAUW Acceptance Letter." Letter to Mary Boyette. 12 June 1945. AAUW Archives. N.p., 19 Apr. 2013. Web. 12 Sept. 2015.

http://www.aauw.org/files/2013/04/carson-to-boyette.pdf.

This letter was written by Carson in 1945, shortly before she would accept her American Association of University Women award. She writes about what she plans to do with the award money, and states that it will go towards the creation of a new book, soon to be *Silent Spring*. Carson also goes in depth about her emotions towards the quickly developing science of biology. The letter expresses her curiosity towards the basic problems of life. It was quite obvious after reading this that Carson was deeply invested in her job and appreciated all the modern technology that allowed her to explore the scientific areas she was curious about. This letter provided insight into what inspired Carson to explore the world of environmentalism. - AA

Carson, Rachel L., "Fishes of the Middle West" (1943). US Fish & Wildlife Publications. Paper 6. http://digitalcommons.unl.edu/usfwspubs/6

This publication was written by Rachel Carson for the US Fish & Wildlife Services. She worked for the service in order to pay off her family's debts shortly after she dropped out of Hopkins University. I found the publication in PDF form through a website dedicated to Rachel Carson. "Fishes of the Middle West" revealed Carson's background in the field of ocean wildlife and showed that she was a credible author who had done plenty of previous research before her book publications. This particular text went in depth about the biographies of midwestern fish, including information about where it is found and the anatomy of the fish. This publication revealed Carson's passion towards wildlife and showed how her previous works influenced her exploration of environmentalism. -AA

Carson, Rachel. "Help Your Child To Wonder." *Woman's Home Companion* July 1956: 24+. *U.S. Fish and Wildlife Service National Digital Library*. Web. 27 Sept. 2015. Rachel Carson worked for the U.S. Fish and Wildlife Services for almost 20 years and had a substantial impact on the department. Because of her long working history, the U.S. Fish and Wildlife Services has access to over a hundred of her notebooks, journals, letters, articles, and other person writings written by Carson. By using their National Digital Library, I was able to find a magazine article written by Carson for *Woman's Home Companion*. The article, titled "Help Your Child To Wonder," goes in depth about the personal experiences she had with her 4 year old nephew named Roger. Together, they would explore forests and beaches, and this time with her nephew furthered her interest in protecting the environment. Carson's article revealed her early interest in wildlife and how her personal life inspired her exploration of environmentalism. - AA

Carson, Rachel. "How About Citizenship Papers For The Starling?" *Nature Magazine* June-July 1939: 317-19. Print.

This primary source magazine article is written by Rachel Carson and discusses the spread of the European starling, a bird which was introduced to New York from Britain in 1890. Even though many think the foreign starling is a mere nuisance, she felt that the people should stop "regarding him as an alien" and grant the starling "American citizenship." This article reveals how invested Carson is in protection book. Her adoration of birds, as shown through this article, is a motivation of her publication of *Silent Spring*, because DDT is known to soften egg shells and kill potential bird chicks, thus lowering the bird's population. This source shows a part of Rachel Carson's exploration of ornithology which inspired her most famous publication. - AA

Carson, Rachel. *Silent Spring*. 215 Park Avenue South, NY, NY 10003: Houghton Mifflin, 1962. Print.

Silent Spring is the book that led Carson to be known as the "nun of nature." Because our project focuses so heavily on this book, reading it is an essential part of our research. In Silent Spring, Carson very clearly states the danger of pesticides, giving an abundance of examples to prove her point. Reading this book gave our group a first hand experience of Rachel Carson's work, and helped us realize why this book had such an impact on the world. -MB

Darby, William. "Silence, Miss Carson." Rev. of Silent Spring. Chemical and Engineering News 1 Oct. 1962: 60-62. Gale Database. Web. 12 Sept. 2015.

This book review was written by William Darby in 1962 from Chemical and Engineering News. He was a professor and chairman of the department of biochemistry at Vanderbilt University school of medicine and was a member and past chairman of the Food Protection Committee. There is bias in this review due to the fact that Darby supports the use of DDT to protect produce. Therefore his review of *Silent Spring* was quite negative. He called Carson ignorant and emotional and claimed her book was biased and pessimistic. Darby also informed the readers some of the plus sides of DDT usage that Carson left out of her book, like how it prevents the spread of malaria. This source was important in revealing how harsh many reviews of the book were and the mean criticism that Carson had to encounter. It was also helpful to show the other side of the issue from the viewpoint of someone who supported the use of food protection chemicals. Even though people tried, no one was able to slow Carson's exploration of environmentalism. -AA

Davis, William A. "MALARIA: BE CAREFUL." Boston Globe (pre-1997 Fulltext): 1. Sep 21 1980. ProQuest. Web. 12 Oct. 2015 .

This article was written by William Davis, a credited writer who worked for the Boston Globe, and it was published in 1980. During Carson's time, malaria was a major issue not only in the U.S. but also worldwide as well. However, the introduction of pesticides helped with this and they were important in killing off disease-carrying mosquitos, especially ones that carried malaria. Pesticides, specifically DDT, led to controlling the deaths caused by diseases, specifically malaria and many Americans began to believe

Very strongly in the use of these pesticides because they kept the death rates very low. However once Carson published *Silent Spring* and eventually pesticides were banned, Americans became infuriated and said that Carson was responsible for the deaths caused by malaria because pesticides were no longer able to be used. This article is very helpful in showing specific reactions in the aftermath of *Silent Spring's* publication. It talks about the new ways that were being invented to help prevent malaria from spreading and how it was necessary to stop using DDT because of its toxicity, which shows the historical significance of *Silent Spring*. Overall, it helps to show historical context in the years after Carson published her book and the specific new ways that were brought about after pesticides were banned.

Gore, Al. "Introduction." Introduction. *Silent Spring*. 1994 ed. NYC: Houghton Mifflin, 1962. N. pag. Print.

Al Gore is an American politician and environmentalist who served as the 45th Vice President of the United States from 1993 to 2001. Over generations, he and Rachel Carson both worked to ban the use of harmful pesticides in the United States. Because of this, some call Al Gore the Rachel Carson of this generation. Rachel Carson had a positive influence on Gore's interest for environmentalism, and therefore led Gore to write the introduction for her book's 35th anniversary edition. In his introduction, he praises Carson and her hard work that led to the publication of her book. This source is significant in our research process because it explains how Carson's exploration in the field of environmentalism created a profound impact, and even inspired the vice president to write his own book about protecting the environment. -AA

Henricksson, John. *Rachel Carson: The Environmental Movement*. Brookfield, CT: Millbrook, 1991. Print.

This book, *Rachel Carson: The Environmental Movement*, was a very helpful source in giving a detailed and thorough look at Rachel Carson. It was written by John Henricksson, who has written many books pertaining to nature, and its style makes it easy to read and provides a multitude of facts. It starts off by by giving an overview of *Silent Spring* and then goes into a biography about Rachel Carson, starting with her early childhood all the way to her death. The book helps to fill in the gaps by giving specific details about Carson. An example being when it talks about her childhood and how much time she spent outdoors as well as writing, thus giving background as to why she became a biologist as well as a writer. Overall, this book is better than most biographies because of level of detail it provides. Also, this book helps to make the connections between Rachel Carson and theme stronger. The book gives specific details about her process in writing *Silent Spring*, which helps to show her exploration, and it also gives details about the aftermath of her book and her encounters with the public, specifically the opposition they gave her about the use of pesticides.

Joan FitzGerald, Globe S. "BAD DAYS LOOM FOR GYPSY MOTH." Boston Globe (pre-1997 Fulltext): 1. Apr 15 1980. ProQuest. Web. 12 Oct. 2015

This article was written by Joan FitzGerald, a writer who worked for the Boston Globe, and it was published in 1980. This article talks about the gypsy moth, a moth that originated in Europe and was accidentally introduced to the United States near Boston in 1869. This moth is a major pest as it feeds on the foliage of many species of plants which can kill them and lead to the loss of forest vegetation. The government launched a project after WWII, using a newly developed pesticide called DDT to fight off and eradicate these bugs. Rachel Carson specifically talks about the gypsy moth in her book *Silent* Spring. Carson says that because the government was determined to kill off this species, they sprayed over three million acres of land with DDT and because of the lack of accuracy the death rate of livestock and wildlife skyrocketed. Once Carson released her book, DDT was eventually banned and it could no longer be used, and therefore it was once again hard to control the gypsy moth population. This article is helpful because shows historical context for after *Silent Spring* was published. It talks about the new methods that were being researched that would help to control the gypsy moth. Overall, it shows the historical significance of Rachel Carson because she effectively stopped the use of DDT but also helped to prompt the exploration of other methods for controlling disease and bugs.

Lorus and Margery Milne. "There's Poison All Around Us Now." The New York Times, n.d.Web. 17 Sept. 2015.

This source is a book review that was published by the New York Times in September of 1962. The review was written by Lorus and Margery Milne who are educators, biologists, and authors of many books including *The Balance of Nature*. Overall the review talked about her use of evidence and how the research she includes in *Silent Spring* makes an impact on the reader. They also mention about Carson presents her solutions to fixing the pesticide problem. Specifically the Milne's focus on how Carson doesn't completely rebuke the use of chemicals when they say "Miss Carson does approve of alternatives to the widespread use of poisonous chemicals. She points to the successful controlling of scale insects with ladybird beetles, and Japanese beetles with the "milky disease." Overall, this source helps to show how Rachel Carson's book is historically significant as it talks about the importance of her book being published in the time period that it was. Specifically, the review mentions the book's success when it was published in The New Yorker and how it got people thinking about how pesticides were being used. -EW

Macdonald, Malcolm E. Letter to Miss Rachel Carson. 16 Mar. 1964. *Beinecke Rare Book and Manuscript Library*. Yale University, n.d. Web. 8 Oct. 2015.

Malcolm E. Macdonald was the owner of a Mobile Home Park located on Cape Cod, Massachusetts. One day, he was approached by a representative of the U.S. Department of Agriculture and was told that he must move all of the trailers in preparation of a DDT spraying. The pesticide spraying would rid the area of the gypsy moth, a bug that is infamously known for killing thousands of trees and is one of the most destructive pests of hardwood trees in the eastern United States. Being against the use of pesticides after reading *Silent Spring*, Macdonald wrote a letter to Rachel Carson asking if she knew of

any other way to rid the land of the pesky moths. This letter reveals that many people recognize Carson as a reliable environmentalism. This primary source is vital is supporting the fact that Carson was extremely well known for he work in the prevention of DDT, and it reveals her inspiration of others. -AA

"Nature Is for the Birds." Editorial. *Chemical Week* 28 July 1962: n. pag. *Nature Is for the Birds*. University of Minnesota. Web. 24 Oct. 2015.

This editorial from *Chemical Week* magazine from 1962 gave insight into how the public reacted to *Silent Spring*. Because the editorial was written for Chemical Week, it was biased against Carson's book, claiming that a couple of dead birds or even humans is the price to pay for the greater good. The editorial does not go out of its way to personally insult Carson, but instead asks questions about whether society or nature is more important. This is important to our research because it is an example of a negative view of *Silent Spring* from the time period it was published in. -MB

"Rachel Carson's Statement before Congress 1963." - Rachel Carson Council, Inc. N.p., n.d. Web. 20 Sept. 2015.

This source is a speech that Rachel Carson gave to the Subcommittee on Reorganization and International Organization on June 4, 1963. Carson's purpose in delivering this speech was to make the government, specifically Congress, aware of the dangers of pesticides in nature. She wanted them to hear about what chemicals, specifically DDT, were doing to the ecosystems throughout the United States so measures could be taken to prevent future damage. Carson backs up her claims with an abundance of different pieces of evidence from various studies as well as her own personal research. This use of evidence was crucial as many people said that her claims were false and it helped to provide Carson with a strong base for her argument. In this speech she brings up six solutions that she thought would solve the pesticide problem, some being legislation, registering chemicals, medical research dealing with the effects of pesticides, and citizens being made aware of the pesticides being used near them. This source was helpful because the environmental movement that Carson helped to start was historically significant to America and this speech played a role in how the government handled the problem. -EW

"Rachel Carson, Winner of the 1952 NONFICTION AWARD for THE SEA AROUND US, National Book Foundation." *Rachel Carson, Winner of the 1952 NONFICTION AWARD for THE SEA AROUND US, National Book Foundation.* National Book Foundation, n.d. Web. 26 Sept. 2015.

This primary source is the acceptance speech Rachel Carson made when her book *The Sea Around Us* won the Nonfiction Award from the National Book Foundation in 1952. Carson's speech provides helpful insight into her desire to make science part of everyday life, which is partly why she chose to start her exploration of pesticides and write *Silent Spring*. In her speech, Carson also talks about the beauty and poetic qualities of the sea, which further illustrates her love of nature. Because this speech was made by Rachel Carson herself it is a very credible source because it is in her own words. -MB

"SILENT SPRING - The New Yorker." *The New Yorker*. The New Yorker, 16 June 1962. Web. 19 Sept. 2015.

This article was published in The New Yorker, a well known newspaper, in 1962. It contains a large excerpt from Rachel Carson's book *Silent Spring*. Carson's book expresses her extensive research about the role of DDT in nature. This article was the first of three published in The New Yorker containing excerpts from Carson's book. The publication of this series of articles helped to get people paying attention to DDT before *Silent Spring* was published. Also, the publication of these articles got people wanting to read her book and created a major buzz about the topic of chemicals in nature. The importance of this source is that it shows Carson's research first being published for the public, which is historically significant, and it was the first of many publications to be made publicizing the harmful effects of DDT and other pesticides in the environment. -EW

"The Desolate Year." Monsanto Magazine (1962): n. pag. The Desolate Year – Monsanto Magazine (1962). ISEE. Web. 15 Sept. 2015.

This primary source is an article called "The Desolate Year" from Monsanto Magazine that parodies *Silent Spring* by showing how awful life would be if no pesticides were used. It vividly describes many different insect infestations. "The Desolate Year" takes many plagues or infestations that have happened in the U.S. before and put them all in one year to exaggerate the effects of not using pesticides. This source is very biased because Monsanto is huge company that manufactures pesticides, so this article is against Carson's idea of controlling pesticide use. -MB

"Toxic Substances Control Act (1975-1976)." Congress.gov. Library of Congress, n.d. Web. 10 Oct. 2015.

This source is a copy of the Toxic Substances Control Act that was enacted by Congress in 1976 and it is published by the Library of Congress on the Congress website. This act states that the Environmental Protection Agency must require reporting and stricter records and testing and it also restricts the use of certain chemicals, such as specific pesticides (mainly DDT). This source is important to look at because it helps to show Rachel Carson and her book's historical significance. *Silent Spring* is a book that uses research as well as other evidence to support the claim that pesticides, specifically DDT, are very harmful to the environment. When her book was published, it ignited a flame in the American people and it brought into the public eye the many issues of DDT. *Silent Spring* was the springboard for the eventual banning of DDT. Specifically, it showed the government the harmful effects of using these chemicals uncontrollably. Eventually, Congress introduced a new act (Toxic Substances Control Act) that banned certain chemicals and made using chemicals in the environment a more restricted process. Overall, this source shows an effect of Carson's exploration of pesticides and it also shows an example of how she is historically significant.

Udall, Stewart L. "Fifth Oral History Interview." Interview by W. W. Moss. *Stewart L. Udall Oral History Interview – JFK #5, 5/20/1970*. John F. Kennedy Presidential Library and Museum, n.d. Web. 11 Oct. 2015.

John F. Kennedy was one person that Rachel Carson influenced with *Silent Spring*. This primary source is an interview of Stewart Udall by W.W. Moss. Stewart Udall was the Secretary of the Interior under President John F. Kennedy, so he had first hand experience working with the president, making him a very credible source. In this interview, Udall mentions Carson when he talks about the Hickory Hill seminars, where she had been a guest and spoke about environmental issues. Even though the Hickory Hill seminar took place when *Silent Spring* had only been published in excerpts in the *New Yorker*, Udall describes the lively discussion that Rachel Carson sparked during the seminar. Udall also talks about the government's policy towards national parks at the end of the interview, saying that JFK deserved credit for changing policies towards national parks. JFK's interest in preserving nature through national parks is important to our research because it is one example of how Rachel Carson influenced others to make a change. -MB

SECONDARY SOURCES

Aronson, Jennifer, and Colleen Reilly. "Rachel Carson Collection Finding Aid." Rachel Carson Collection. Chatham University, 2006. Web. 10 Sept. 2015.

These biographical notes from Chatham University went more in depth about Rachel Carson's academic life and legacy. Her academic life shows what background Carson came from that made her such an influential person. This piece showed how Carson was historically significant by showing the effects of her book *Silent Spring*. It influenced President John F. Kennedy to look into the control of pesticide use, and got the pesticide DDT banned from the U.S. This source was from the Chatham University website, which is the same college Carson went to, so it is most likely biased in her favor. -MB

Barnhill, David. "THE "NEW ENVIRONMENTALISM" OF THE 1960S." (n.d.): n. pag. Web. 11 Oct. 2015.

This secondary source from the University of Wisconsin gives a general outline of environmentalism in the 1960s. This was written by David Barnhill, who was the Director of Environmental Studies at the university, so he is very credible. The outline was very useful to our research because it clearly shows how Rachel Carson's *Silent Spring* led to the rising environmental movement, as well as actual changes that were made as a result of her book. This is very useful to our research because it gives us specific new topics to look into when gathering information about the effect Rachel Carson had. -MB

"CELEBRATING THE BIRTH OF MODERN ENVIRONMENTALISM." States News Service 11 Dec. 2012. Academic OneFile. Web. 23 Sept. 2015.

This article talks specifically about how Rachel Carson influenced the environmental movement. It is very important to our research because it goes in depth on many different effects of Silent Spring. It covers the political effects of Silent Spring, like how it influenced environmental issues to be debated in the Senate for the first time. Furthermore, the article mentions that Carson had an effect on women in science, which we can look into further for more information on the effects of Rachel Carson. This is a news article that was published by UNESCO, and praises Carson's work. UNESCO is the United Nations Educational, Scientific and Cultural Organization, and because it is a government run organization, it is very credible because the United Nations would be able to access to a lot of information from other scholarly sources to publish this article.

-MB

Conniff, Richard. "Rachel Carson's Critics Keep On, But She Told Truth About DDT." Yale Environment 360, 10 Sept. 2015. Web. 11 Sept. 2015.

This article published on Yale's environmental website focuses on the hate Rachel Carson received from the public after her book *Silent Spring* was published. The article mainly focuses on how people believe that because of her book DDT was banned and as a result malaria continues to be a major epidemic. Conniff provides quotes from famous people who have "hated" on Carson. An example being when he says, "Former U.S. Senator Tom Coburn has declared that 'millions of people, particularly children under five, died because governments bought into Carson's junk science claims about DDT." Conniff also says, "The Competitive Enterprise Institute, a libertarian think tank, devotes an entire website to the notion that 'Rachel was wrong," asserting that "millions of people around the world suffer the painful and often deadly effects of malaria because one person sounded a false alarm." After he talks about the reasons people hate Carson, Conniff uses evidence to prove why Carson is not to blame for malaria being a major epidemic today. Overall, this article was a useful article as it takes hate directed at Carson, which is important to analyze, and combats it with evidence proving why Carson was right. -EW

Dunlap, Thomas R. *DDT: Scientists, Citizens, and Public Policy*. Princeton, NJ: Princeton UP, 1981. Print.

Thomas R. Dunlap is the Assistant Professor of History at Virginia Polytechnic Institute and State University with a specialty in Environmental History. His novel is the story of the controversial pesticide and its part in the rise of the environmental movement. Throughout his novel, Dunlap investigates various pesticides protesters who fought to end the use of DDT. He mentions Rachel Carson twice only within the first page of his book, revealing her vital role in the history of pesticide use. Dunlap donates a whole chapter of the book to the "storm over *Silent Spring*," which goes in depth about her testification before the Ribicoff committee. This source reveals Carson's significant role in the environmental movement and goes in depth about the overall history of DDT. -AA

Griswold, Eliza. "How 'Silent Spring' Ignited the Environmental Movement." The New York Times. The New York Times, 22 Sept. 2012. Web. 10 Sept. 2015.

Eliza Griswold's article that was published in The New York Times Magazine provides a lot of useful information about Rachel Carson and her book *Silent Spring*. It starts off by talking about the book and its importance to not only science but to history as well. Griswold compares Carson to Thoreau saying that "Carson influenced the environmental movement as no one had since the 19th century's most celebrated hermit, Henry David Thoreau, wrote about Walden Pond." The article then begins to introduce Rachel Carson, giving a brief biography, and talks about what spurred her to begin exploring the problem of pesticides in nature. This source was a helpful source for the beginning stages of the project because it gives on overview of both the book and of Carson and then talks about what happens as a result of *Silent Spring*. Also, it touched on the aftermath of that chemical companies faced after the book was published which is an important component of why the book is so crucial to the environmental movement. Overall, it was a good source to use as it is a good introduction to Rachel Carson and her book. -EW

Hazlett, Maril. "Rachel Carson." Encyclopedia of Science, Technology, and Ethics. Ed. Carl Mitcham. Detroit: Macmillan Reference USA, 2005. Biography in Context. Web. 10 Sept. 2015.

This secondary source came from the Encyclopedia of Science, Technology and Ethic and contained a lot of general information about Rachel Carson. It gave a brief overview of her early education and career which allowed her access to lots of research which sparked her ideas about science and the environment. The article also talked about Carson's most famous book, *Silent Spring*, in which she argues that pesticides are endangering the environment and that science was ignoring this. The effects of *Silent Spring* were also covered in this source, which discussed how Carson laid the groundwork for the environmental movement in the late twentieth century. This article was very factual and did not contain opinion about Carson's work. -MB

Isenberg, Robert. "The Book That Changed The World." *E Magazine Print Issue*. E Magazine, Sept. 2012. Web. 25 Sept. 2015

This source is an article that was written by Robert Isenberg, a journalist who focuses primarily on writing about environmental topics, and was published by E Magazine. The article is broken down into many different sections, but the most important parts are the ones about Rachel Carson's legacy and about Silent Spring itself. The section about Rachel Carson's legacy helps to support why Rachel Carson is historically significant. Isenberg talks about not only how Silent Spring was relevant to the U.S. but how it started environmental movements worldwide. This shows how big of an influence Carson made in the world of science and how many people responded to her message. Also, this shows how Carson relates to theme because her exploration of pesticides is known throughout the world and is very important to the Environmental Movement in other places besides the United States. -EW

Johnson, Caitlin. "The Legacy Of "Silent Spring"" *CBS News*. CBS Interactive, 22 Apr. 2007. Web. 18 Sept. 2015.

This article was written by Caitlin Johnson and published by CBS News, a well known and reliable news company. The article talks about Rachel Carson's book *Silent Spring* and its impact both in the time it was published, now, and in the future. The article starts off with talking about post-war America and how a bright future was thought to be not to far away thanks to pesticides. Robert Kennedy is interviewed and he talks about how the pesticides were a normal part of life during his childhood. He then goes on to say that Carson "was a pioneer who inspired a generation of activists." The article transitions to giving a little bit of background information about Rachel Carson. It mentions her fight to finish *Silent Spring* while fighting breast cancer. The end of the article goes into detail about the impact *Silent Spring* has had in both the the 1960's and now. The article is very useful as it provides historical context that is good to be exposed to when writing about how Carson's book impacted people. It is helpful to know how they felt about the environmental movement that Carson created through publishing *Silent Spring*. Overall, this article helps to show how Carson's book ended the pesticide era and spurred forth a new era that revolved around the idea of creating a clean environment. -EW

Jungck, John. "Rachel Carson Human Ecologist." *The American Biology Teacher* 46.6, Human Ecology (1984): 302-03. *JSTOR*. Web. 25 Sept. 2015.

The University of California Press offered this very informative scholarly journal about Carson's legacy in the field of ecology. I found this particular article using the Boston Public Library's database collection, specifically the online scholarly journal database, JSTOR. John Jungck, the author of this article, is the Mead Chair of the Sciences and Professor of Biology at Beloit College. He writes about how Carson became a "symbol of sanity" and spokeswoman of the environmental movement. Even with all of her accomplishments, the author points out how her name has not been discussed in modern education as it deserves to be. This article revealed the significance of Rachel Carson's work, yet how in today's society it goes underappreciated. Jungck calls Carson one of the greatest, and most underappreciated, leaders of environmentalism. - AA

Koch, Wendy. "Carson's 'Silent Spring' Spurred Environmental Movement." *USAToday.com*. USA TODAY, 27 Sept. 2012. Web. 27 Sept. 2015.

This article talks about the role of Rachel Carson's book *Silent Spring* in the environmental movement. It was written by Wendy Koch, a major reporter for USA Today who focuses mainly on environmental issues. The article starts off by talking about Rachel Carson's life and what spurred her to begin focusing on nature and writing about major environmental issues. However, the majority of it was spent on showing how the publication of *Silent Spring* impacted the environmental movement. It is said in the article that Rachel Carson did not start the movement, but instead she inspired it. This shows why Rachel Carson is historically significant. Through publishing *Silent Spring*, Rachel Carson was able to get people to start paying attention to issues that were otherwise being ignored. Overall, this article was helpful in shedding light on the role Rachel Carson played in the beginning stages of the environmental movement. -EW

- Lear, Linda. "Rachel Carson and the Awakening of Environmental Consciousness, Wilderness and American Identity, Nature Transformed, TeacherServe, National Humanities Center." National Humanities Center, n.d. Web. 20 Sept. 2015.

 http://nationalhumanitiescenter.org/tserve/nattrans/ntwilderness/essays/carsonf.htm.

 Linda Lear, American journalist and personal biographer for Rachel Carson, depicts through this broad context source what influenced Carson to explore the environmental movement and how her exploration impacted others to continue to strive for an environmentally friendly world. The author gives various examples of how Carson's work led others to publish their own opinions about environmentalism, like Elizabeth Kolbert who followed Carson's *Silent Spring* with *Field Notes From a Catastrophe*, or Al Gore who wrote *An Inconvenient Truth* and was awarded a Nobel Prize for his book. This source is significant in order to show how the polluted environment Carson was raised in led to her having an active voice against DDT and other chemicals that destroyed nature.

 -AA
- Lear, Linda. "Rachel Carson's Biography." The Life and Legacy of Rachel Carson. The Linda Lear Center for Special Collections & Archives, 1998. Web. 11 Sept. 2015.

 http://rachelcarson.org/Biography.aspx#.VfH8UbSOZes.

 Linda Lear, author of *Rachel Carson: Witness for Nature*, wrote this brief biography for Carson's memorial website. Lear is a reliable source because of her occupation as an environmental historian and a biographer. This source was useful for beginning our research project because it tells her life story concisely. However, because the author was hired as Carson's personal biographer, she is biased into giving her a positive review. It's main purpose was to provide a basic biography in order to introduce her to the reader. Lear gave information regarding where Rachel was born, where she studied, and her main accomplishments. It was structured in chronological order, thus revealing the impact of Carson's actions on her future. -AA
- "Legacy of Rachel Carson's Silent Spring." American Chemical Society National Historic Chemical Landmarks. American Chemical Society, 26 Oct. 2012. Web. 13 Sept. 2015. This article published by the American Chemical Society provides a lot of good information and is organized in a timeline, which makes it easier to read and understand. It starts off by giving a brief background about post a World War II science (mainly about when pesticides were starting to be used). Then it talks about Rachel Carson's life and it gives a short biography which tells how she first began to become interested in science. After that, it talks about her two most famous books and how they impacted the world of science. And to wrap it up, it closes by saying how her work is still relevant today. This article gives a nice introduction about Carson and her life as well as her contribution to science. -EW

Lewis, Victor. "Rachel Carson Remembered." *Rachel Carson Remembered*. JSTOR, n.d. Web. 23 Sept. 2015.

Because we are looking at the effects of Rachel Carson's exploration, this critical review of *Silent Spring* was helpful to our research. It emphasized that *Silent Spring* changed history and praised Carson's writing style. The author is a policy board member of the Urban Habitat Program, an organization that works to empower low income communities and further economic, environmental, and social justice, so they would have a very positive view towards Carson because they too work for environmental justice. The author states that *Silent Spring* is not an outdated book and remains important today, which truly shows that Carson's work has had a lasting effect. Although this is a critical review, the author only really has one point of criticism for Carson and is very biased in her favor. However, this is a credible source because it came from a scholarly journal article written by a board member of Urban Habitat, which also works to improve the environment, giving the author a credible background of working for the environment.

-MB

Lipske, Michael. "How Rachel Carson Helped Save The Brown Pelican." National Wildlife Federation. N.p., 1 Dec. 1999. Web. 14 Sept. 2015.

http://www.nwf.org/News-and-Magazines/National-Wildlife/Birds/Archives/2000/How-Rachel-Carson-Helped-Save-The-Brown-Pelican.aspx>.

The National Wildlife Federation is a nonprofit organization that is well-known for its dedication to protect wildlife. Because they too want to preserve the environment, this article is biased towards Carson's research. Written by Michael Lipske, this article showcased the specific effects that DDT had on wildlife. After reading it, I was able to learn the significant impact that Carson's work had on the ecosystems of the planet. If it weren't for Carson and her activism against DDT, pelicans and many other bird species may have become extinct many years ago. This shows how her exploration of environmentalism and her passion for biology has affected today's wildlife. As the article showed, she explored outside the boundaries in order to make a change. -AA

Lockitch, Keith. "Rachel Carson's Genocide - Capitalism Magazine." *Capitalism Magazine*. Capitalism Magazine, 22 May 2007. Web. 20 Sept. 2015.

Rachel Carson encountered a lot of hate as a result of *Silent Spring*. This article blames Carson for the malaria outbreaks that are happening all over the globe. The author, a professor at the Ayn Rand Institute, portrays DDT in a good light by pointing out how it killed off malaria-carrying mosquitoes. This article also claims that Carson was wrong and DDT is not actually harmful to humans. Overall this article is important to our research because it relates to the theme of encounter by being an example of the kind of hate Rachel Carson was assaulted with when *Silent Spring* was published. -MB

Moyers, Bill. "Rachel Carson and DDT." PBS. PBS, 21 Sept. 2007. Web. 19 Sept. 2015. http://www.pbs.org/moyers/journal/09212007/profile2.html.

This article, written by Bill Moyers, gives a brief overview of the history of DDT and how Carson decreased its popularity in food production. Moyers is an accredible American journalist and political commentator. Throughout the text, he provides direct quotations of various authoritative figures that both approved and disapproved of Carson's work. It was interesting to see how common DDT was in the past, and how it's reputation has changed because of Carson and her exploration. This article gave me the basic information about DDT which allowed me to further understand Carson's actions towards preventing it. -AA

- "Overview of the 1960s." *Digital History*. University of Houston, n.d. Web. 11 Oct. 2015. When looking at the importance of *Silent Spring*, it is important to know the context that surrounds it and what was also going on at that time period. This general overview gave us an idea of what else was going on in the 1960s when *Silent Spring* was published. It shows that the 1960s was a time of change, and there were a lot of different movements going on, so the people were probably used to change during that time which made *Silent Spring* so accepted by the public. This outline was from the digital history website from University of Houston, so it is very credible. -MB
- Paull, J. "The Rachel Carson Letters and the Making of Silent Spring." SAGE Open 3.3 (2013): n. pag. SAGE Open. Web. 14 Sept. 2015.

 This article talked a lot about the research Carson did in the process of writing *Silent*

This article talked a lot about the research Carson did in the process of writing *Silent Spring*. This is vital to our research because we are looking at the exploration Carson did through her research about pesticides. This article helped tie our topic into the theme perfectly, as it gives lots of details on where Carson got her research. Carson got her research primarily from two farmers in Long Island who collected evidence against DDT when suing for damages done to their farms as a result of DDT sprayings. This article also gave general information about topics that need to be further explored, such as the organics movement and letters that Carson wrote to the two farmers. Bias in this article was minimal, giving mostly facts and not much opinion about Carson and her work. -MB

"Rachel L. Carson Collection, 1946-1964." *Maine Women Writers Collection*. University of New England, n.d. Web. 24 Oct. 2015.

http://www.une.edu/mwwc/research/featured-writers/rachel-l.-carson-collection-1946-1 964>.

This source was published through the University of New England's webpage, therefore determining its reliability. The main point of the article is describing a collection of Carson's postcards, letters, and more of her documentations that can be found at the university. The most important aspect was, in fact, the biographical blurb that quickly introduced Carson including some historical context. This source is useful for our research because as we began to create our outline of the script for the documentary, we noticed that we needed more information about Carson's mother's influence on her, and this source fulfills our needs. -AA

Radford, Tim. "Silent Spring by Rachel Carson – Review." Silent Spring by Rachel Carson – Review. The Guardian, 30 Sept. 2011. Web. 10 Sept. 2015.

This secondary source from The Guardian is a review of *Silent Spring*. It not only talked about the effects of the book, but its relevance today and the style of the book as well. It is relevant to our research because it proves the historical significance by showing that the problem Rachel encountered and faced is still important today. This source is probably biased in Carson's favor, however, because the newspaper is known for its Keep It In The Ground campaign and their active stance on climate change. -MB

Smith, Michael B. "Silence, Miss Carson!' Science, gender, and the reception of Silent Spring." *Feminist Studies* 27.3 (2001): 733+. *U.S. History in Context*. Web. 11 Sept. 2015. In order to gain a broader view on Carson's *Silent Spring* and it's impact, this article was extremely crucial in revealing the mixed feelings of the public. "Silence, Miss Carson" was found through the Gale Database, which is a trustworthy and reputable source. Written by Michael B. Smith from Feminist Studies Inc., this article provides multiple sources of evidence that shows the amount of abuse targeted towards Carson. It also provides a feminist point of view to the critique, which can lead to some bias. Some may say that the criticism towards *Silent Spring* was merely factual, but Smith begs to differ. In this article, he supports his claims that many of the book reviews were sexist and degrading towards Carson. This article provided reliable details that supports our claim stating Carson had many harsh encounters with people from the chemical industry. -AA

Steele, Melanie. "Silent Spring by Rachel Carson-Review." *Indie Farmer*. Indie Farmer, 2 July 2015. Web. 26 Sept. 2015.

This source is a critical review of Rachel Carson's book Silent Spring. It was written by Melanie Steele who is a major writer for Indie Farmer and who has written many articles concerning farming and agriculture. Steele begins by giving a little bit a biographical information about Rachel Carson and then goes on to talk about Rachel Carson's role as a scientist, which Steele said was influential to her book. Steele talked about how *Silent Spring* was packed with sources. In the first chapter. She credits 42 different sources. Steele points out that the abundance of sources helps to make *Silent Spring* a reliable source. This information is helpful because today there is a lot of hate regarding Carson and many people think that her book was wrong. However, this shows that the people who disagree with Carson and say that she has little evidence do not have a large platform to stand on when making that argument. Overall, it shows how her exploration of the topic of pesticides that was present in her book helps to make it a reliable source. -EW

- Stoll, Mark. "RACHEL CARSON'S SILENT SPRING, A BOOK THAT CHANGED THE WORLD." Silent Spring. Environment & Society Portal, 2012. Web. 17 Sept. 2015. Rachel Carson did not just have an impact in the U.S., but globally as well. This article goes very in depth not only about the impact of *Silent Spring* in the United States, but also what effect it had in Europe. It was written by Mark Stoll, a college professor with a PhD in Environmental Studies at Texas Tech University, so it is very credible. The article also talks about Carson's encounter with the chemical industry after her book was published. This is very important to our research because it shows how Carson's exploration of environmental science is still important today, which makes it historically significant. This article was mostly factual, but was published by the Environment & Society Portal so it is slightly biased towards Carson. -MB
- "The Story of Silent Spring." Silent Spring Summary. Natural Resources Defense Council, 5 Dec. 2013. Web. 10 Sept. 2015.
 - The book *Silent Spring* was a very important part of our research, because it is how Rachel Carson told the public about the problem she had encountered. This article went in depth about why Carson wrote Silent Spring and the effects it had. It also gave information on the pesticide DDT which the book was written about. Furthermore, it briefly covered why Rachel Carson was able to be so successful when writing Silent Spring and the criticism it encountered. This source stated facts and had little bias as it talked about both the criticism for the book and the good effects of the book. -MB
- United States Environmental Protection Agency. *DDT Ban Takes Effect.DDT Ban Takes Effect*. EPA, 4 Dec. 2014. Web. 26 Sept. 2015.
 - This press release by the EPA from December 31, 1972 is important to our research because we are looking at the effects of Rachel Carson's exploration. The EPA is a government agency so it is a credible source. It was created because of *Silent Spring*, and this press release announcing the ban of DDT is another excellent example of the effect Rachel Carson had. The source stated when and why DDT was being banned, explaining the dangers of the pesticide. It also gave a brief history on the creation and use of the chemical. The press release is not biased because Rachel Carson is not mentioned in the source at all. -MB
- Walls, David. "Environmental Movement." *Sonoma State University*. N.p., 9 Nov. 2014. Web. 11 Oct. 2015. http://www.sonoma.edu/users/w/wallsd/environmental-movement.shtml. This source was written by David Walls, a professor at Sonoma State University, and it provides vital background information about the formation of the environmental movement and it's positive impacts. He begins by explaining the emergence of the environmental movement from the conservation tradition, using Henry David Thoreau and John Muir as examples of two conservationists who contributed to the movement. In this article, there is a timeline of key environmental legislation from 1963 to 1980. Rachel Carson published her book, *Silent Spring*, in the early 1960's, and the timeline reveals the impact that her work had on the future of the environmental movement. This broad context source is important in revealing both Rachel Carson's historical context and her legacy. -AA

Walsh, Bryan. "How Silent Spring Became the First Shot in the War Over the Environment." *TIME Science*. TIME Magazine, 25 Sept. 2012. Web. 25 Sept. 2015.

This source is an article that was written by Bryan Walsh, who is a senior editor for TIME Magazine, and was published by TIME in the science portion of their website. Walsh begins by talking about the hate that Rachel Carson got for supposedly causing millions of deaths. Walsh says that people believe that because DDT helped kill parasites that carried malaria and Carson helped to get DDT banned, she in a way is responsible for all the deaths. However what makes this source significant is that Walsh takes all the hate pointed at Carson and counteracts it by giving evidence that shows why Carson was not responsible. This helps to support the idea that Rachel Carson was historically significant as she simply brought to light the effects of DDT and did not actually ban it. -EW

Watts, Tim. "Environment." World History: The Modern Era. ABC-CLIO, 2015. Web. 9 Oct. 2015.

This informational reference article found using the database ABC-CLIO discusses the history of the environmental movement in Europe and the United States. It mentions Carson, along with several other impactful environmentalists such as George Perkins Marsh and Murray Bookchin. In the beginning of the article, the author, Tim J. Watts, explains the various factors that inspired the beginning stages of environmentalism in the 16th century. During the Industrial Revolution, there was a turning point in the environmental movement, for the people were beginning to understand that humans were indeed altering the environment for the worse. Watts goes on to reveal the progress of the environmental movement in the 1960's, and it's unfortunate decline in modern times. This secondary source is important because it shows that other people in the world shared very similar views with Carson, and it gives background information about the environmental movement as a whole. In our project, this article can provide the historical context for Carson and inspirations for her environmental ways. -AA

Zubrin, Robert. "The Truth About DDT and Silent Spring." The New Atlantis. The New Atlantis, n.d. Web. 13 Sept. 2015.

This article opens with a flashback to 1943, talking about the lack of sanitation after World War II and all of the epidemics that broke out because of it. The article then transitions into introducing DDT and the supposed positive effects that it had. It mentions how "in 1946, the U.S. Public Health Service initiated a campaign to wipe out malaria through the application of DDT to the interior walls of homes. The results were dramatic. In the first half of 1952, there were only two confirmed cases of malaria contracted within the United States." However, the article turns and talks about what happened when *Silent Spring* was published. After this subject is brought up a clear bias is shown when the author says, "while excellent literature, however, *Silent Spring* was very poor science. Carson claimed that DDT was threatening many avian species with imminent extinction. Her evidence for this, however, was anecdotal and unfounded. In fact, during the period of widespread DDT use preceding the publication of *Silent Spring*, bird populations in the United States increased significantly, probably as a result of the pesticide's suppression

of their insect disease vectors and parasites." The author then proceeded to talk about why the banning of DDT was wrong and to expunge false claims about it as well. This article is a helpful because it shows the perspective of people who disagree with Carson's book. It provides information as to why people didn't agree with the banning of DDT which is important to see when trying to understand both sides of the argument. -EW

Argument Outline:

THESIS: Rachel Carson's exploration in the field of pesticides in the late 1950s and early 1960s led her to be rightfully known as the "nun of nature." Although this field had been explored before, Carson was able to synthesize previous research about pesticides in her book, Silent Spring, in a way that the public could easily grasp. Silent Spring became a very controversial book as it brought the pesticide issue into light for the first time, causing Carson to encounter opposition from the chemical industries who attempted to discredit her claims. Despite their efforts, Silent Spring inspired people to minimize their use of pesticides and protect the environment.

- A. Rachel Carson's early life influenced her and made her love nature.
 - a. Her mother's love of nature was passed down to Carson.
 - i. mother loved nature and influenced Carson to do the same (Linda Lear)
 - ii. mother pushed Carson to enter writing contests which improved her writing skills (Rachel Carson: The Environmental Movement)
 - iii. her mom also taught her many vital writing skills at a young age (CBS Documentary)
 - b. Growing up, Caron's surroundings nurtured her fascination with the world around her.
 - i. grew up in Springdale PA on a 65 acre farm --> she was surrounded by nature (Rachel Carson: The Environmental Movement)
 - 1. loved wandering around in the fields (CBS Doc)
 - 2. fascinated by living things like birds and insects (CBS Documentary)
 - ii. during the second wave of Industrialization, two electric plants were built next to her home so she also experienced pollution
- B. Her college education was a turning point for Carson.
 - a. At the Pennsylvania College for Women, now Chatham College, Carson explored her interest in writing and biology.
 - i. switched her major
 - 1. originally an English major, but Mary Scott Skinker was a mentor for Carson who convinced her to switch her major (*Rachel Carson: The Environmental Movement*)
 - 2. gave her a foundation in both writing and science
 - b. A summer program at Marine Biological Laboratory gave Carson experiences that led her to write three very popular books about ocean life.
 - i. first introduced to the ocean --> led her to write books about it later in life (Aronson, Jennifer)
 - c. John Hopkins furthered her scientific knowledge.
 - i. worked in a lab where she got a good background in embryonic development which later helped her when finding negative effects of DDT (Rachel Carson: The Environmental Movement)
- C. Her early career gave Carson a solid foundation for becoming a successful science writer.

- a. Because of her career as a science editor and writer for the Bureau of Fisheries, Rachel Carson was able to practice her scientific writing style targeted towards the public. (U.S. Fish and Wildlife Service) (Aronson, Jennifer)
 - i. gave her lots of experience when writing about science in a way that the public would understand
 - ii. while she worked for the Bureau of Fisheries she published *The Sea Around Us* and *Under The Sea Wind*, which became best sellers and allowed her to quit her job and become a full time writer (Aronson, Jennifer)
- D. The time period that the book was published in led *Silent Spring* to be successful. (late 1950s-early 1960s)
 - a. DDT was developed and widely used during the 1950s-1960s. The popularity of this chemical led *Silent Spring* to have even more of an impact because the public was more able to realize the danger they were in. (Dunlap)
 - i. used during WWII to reduce disease carrying insects on islands
 - ii. became available to the public as an insecticide
 - iii. extremely common in everyday life (CBS Documentary)
 - 1. trucks would drive down streets, spraying DDT
 - a. kids would play in the fog
 - 2. people used it to treat lice, which was more common back then
 - b. The 1960s was a time period of change, with many different movements going on where people tudemanded that the government change their ways. ("Overview of the 1960s.")
 - i. because of all these movements, people were more able to accept Carson's radical ideas in *Silent Spring* (Carson was not the first person to spread these ideas but her method was the most successful)
- E. Through her research for *Silent Spring*, Rachel Carson explored the field of pesticides and found shocking information about the dangers of pesticide use.
 - a. Negative effects of DDT led Carson to write a book about the dangers of DDT and other pesticides, which she called *Silent Spring*. Rachel Carson: The Environmental Movement)
 - i. eradication of gypsy moth using DDT (Rachel Carson: The Environmental Movement)
 - ii. the death of birds because of DDT sprayings (letter by Olga Owens Huckins to the *Boston Herald*)
 - iii. eradication of fire ant effects (Silent Spring)
 - iv. sage land eradication (Rachel Carson: The Environmental Movement)
 - b. Rachel Carson traveled far and wide in order to gather research from various sources to use in her book.
 - i. Library of Medicine of the National Institutes of Health Rachel Carson: The Environmental Movement)
 - 1. information of pesticide effects
 - ii. lots of her research came from two biodynamic farmers, Marjorie Spock and Mary T. Richards in Long Island, NY (Paull, J.)
 - 1. their farms were under the threat of government DDT spraying, so

- they brought it to court and sued for the damages (they lost) but they then gave the evidence they collected to Carson
- 2. Carson contacted Marjorie and Spock and Richards supply Carson with papers, important contacts, files of references
- iii. Carson used Wilhelm Hueper's (researcher and founding director of the environmental cancer section at the National Cancer Institute) work to learn about cancer-causing chemicals (Linda Lear)
- F. *Silent Spring* had many long term and short term effects which protected the environment from potential destruction.
 - a. Carson's fans wrote letters to the government about her book and the prevention of pesticide use. (Rachel Carson: The Environmental Movement)
 - i. Before *Silent Spring* was published, she wrote to E.B White, who helped her get *Silent Spring* in *The New Yorker* JFK took notice after which caused *Silent Spring* to change laws (*Rachel Carson: The Environmental Movement*)
 - 1. mentioned the book in a press conference (CBS Doc)
 - 2. ordered the PSAC to write a report on pesticides which caused further research of pesticides
 - a. their report solidified Rachel Carson's claims
 - 3. EPA was formed and eventually put restrictions/bans on pesticides (United States Environmental Protection Agency & Rachel Carson: The Environmental Movement)
 - 4. laws were passed where companies had to prove that chemicals were not harmful
 - b. Silent Spring sparked a global environmental movement.
 - i. protected various wildlife from being killed by pesticides (CBS Doc & Lipske, Michael)
 - ii. inspired Sweden, Finland, Britain, Netherlands, Germany, and France (Stoll, Mark)
 - 1. Silent Spring actually changed the vocabulary used in Sweden and Finland changed from 'pesticides' to 'biocides'
 - iii. inspired others to voice their opinion (Linda Lear)
 - 1. Al Gore wrote "An Inconvenient Truth"
 - 2. Elizabeth Kolbert wrote "Field Notes From a Catastrophe"
 - 3. Bill McKibben wrote "The End of Nature"
 - 4. foreshadowed the debate of clean energy, global warming, and organic food (CBS Doc)
 - c. Because of the strong stance Carson took against the use of pesticides, she encountered lots of opposition from the chemical industries.
 - i. one chemical company tried to prevent the publication of *Silent Spring* before it was even publically released (Michael B Smith)
 - ii. Monsanto wrote "The Desolate Year" to parody Silent Spring ("The Desolate Year")
 - iii. the encounter caused more publicity
 - 1. Carson's ideas were spread further

- iv. Negative reviews (Michael B Smith)
- v. biggest critic was Dr. Robert White Stevens (CBS Doc)
 - 1. he was way over the top
 - 2. said that if Carson had her way, hundreds of thousands of people would be starving in the streets tomorrow
 - 3. "we would return to the dark ages"
 - 4. "insects and vermin would inherit the earth"
- d. Carson's unconventional way of writing scientific material sparked both positive and negative comments about her emotional writing style. (Michael B Smith)
 - i. some were sexist, blasted her emotional writing style (Darby)
 - 1. it was rare for a woman to speak with any authority in the 1960's
 - ii. her writing style was able to communicate her true adoration for nature
 - iii. wanted to tell her readers about the wonders of nature
 - iv. wanted to "instill her writing style with an ethic of how beautiful nature is, how intricate it is and how everything in nature is related to everything else" (Linda Lear CBS Doc)