

The American Environmental Movement of the 1960s and 1970s

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Junior Division

Historical Paper

Paper Length: 1878

During the 1960s and 1970s, many events lead people to realize that they actually had the power to cause change. The environmental movement of this time period is a very prominent example. Many people represented in the media wanted to make a change. The laws reformed such as the the Clean Air Act of 1970 and the Clean Water Act of 1972 are proof. Events such as hydrogen bomb testing on Bikini Atoll, oil spills off the coast of California, pollution of the Great Lakes, and the use of insecticides were widely publicized and cause for great concern. Books published at the time, such as "*Silent Spring*," became widely popular and caused public outrage. Environmental conflicts during the 1960s and 1970s have caused people to make important and influential compromises for the environment.

Human caused environmental problems in the United States have increased greatly with the rise of industry since the late 1800s¹. A development in technology lead the rise of industry. There was the development and expansion of the industrial economy, big business, and large-scale agriculture.² The environmental movement was a very important contributor in the realization of how humans can damage the Earth and the great lengths we need to go to protect it.

Author Rachel Carson is considered by some to be the mother of the environmental movement for her book, "*Silent Spring*."³ This book was published at the beginning of the environmental movement on September 27, 1962. *Silent Spring* was a

¹ "The Development of the Industrial United States (1870-1900)." *Smithsonian The National Museum of American History*, National Museum of American History, americanhistory.si.edu/presidency/timeline/pres_era/3_657.html.

² The Development of the Industrial United States (1870-1900)."

³ Griswold, Eliza. "How 'Silent Spring' Ignited the Environmental Movement." *The New York Times*, The New York Times, 21 Sept. 2012, www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html.

landmark for the development of the environmental movement. This book identifies the harmful effects of pesticides on humans, as well as the land. Rachel Carson created a work that effectively caused great debate within the scientific community and the general public.⁴ These discussions led to new laws put into effect, meant to protect our air, water and health.⁵

According to Carson, “During the past quarter century this power has not only increased to one of disturbing magnitude but it has changed in character. The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers, and sea with dangerous and even lethal materials. This pollution is for the most part irrecoverable; the chain of evil it initiates not only in the world that must support life but in living tissues is for the most part irreversible.”⁶

This book describes how negligent and haphazard use of agricultural pesticides and chemicals polluted our streams, damaged animal populations, and caused severe medical problems for humans. Carson built a strong case against pesticides, citing dozens of scientific reports. Many of these reports about the harmful effects of pesticides had been known about in the scientific community for quite some time.⁷ However, Carson was the first person to gather the findings and publish them to the public.

Nevertheless, there was backlash from the chemical industry. The chemical industry released an expensive campaign including a parody of Carson's “A Fable for

⁴ “Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark.” *American Chemical Society*, Chatham University in Pittsburgh, Pennsylvania, 26 Oct. 2012, www.acs.org/content/acs/en/education/whatischemistry/landmarks/rachel-carson-silent-spring.html.

⁵ “Legacy of Rachel Carson's Silent Spring National Historic Chemical Landmark.”

⁶ Carson, Rachel L. *Silent Spring*. Houghton Mifflin, 1962.

⁷ “How 'Silent Spring' Ignited the Environmental Movement.” *The New York Times*

Tomorrow,” and a five page long fact sheet that argued without pesticides America would be overrun with insects and Americans would not be able to grow enough food.⁸

Silent Spring implanted new ideas into American’s minds over the use of pesticides and how chemicals can affect not only animals and insects, but humans as well. Many government leaders including President John F. Kennedy and his Secretary of the Interior, Stewart L. Udall, took Carson very seriously. Carson’s ideas and research became the central testimony at two congressional hearings; and a Presidential Science Advisory Committee 1963 report on pesticides confirmed Carson’s call for limits on the widespread use of pesticides and called for further research into their health hazards.

Another event at the height of the environmental movement had an important impact in particular; this was in 1969, when the Cuyahoga River caught on fire. This event caused incredible public outrage over the dumping of sewage and industrial chemicals into the Great Lakes. There was great backlash from the media. Musicians and artists such as Randy Newman in his song “Burn On,” and Dr. Seuss originally in his book “The Lorax” referenced the fire. (Though in 1990, this part was removed.)

There was a rise of Great Lakes industrialization in the early and mid 20th century. The Great Lakes were considered public sewers and waste disposal lagoons. Anyone who questioned the dumping of these pollutants was considered to be “anti-progress”.⁹ Dirty rivers were seen as a sign of prosperity for industry.¹⁰ The

⁸ “How ‘Silent Spring’ Ignited the Environmental Movement.” *The New York Times*

⁹ McDiarmid, Hugh. “When Our Rivers Caught Fire.” *Michigan Environmental Council*, Michigan Environmental Council, July 2011

https://www.environmentalcouncil.org/when_our_rivers_caught_fire

¹⁰ “When Our Rivers Caught Fire.” *Michigan Environmental Council*

Chicago River had fires so often they were seen as community events. In 1969, shortly after the Cuyahoga River incident, the Rouge River also caught fire. Flames could be seen 50 feet in the air. The 1969 Rouge River fire didn't get too much media attention though. People in the area accepted the fires as a part of industrial operations which brought jobs to the area.¹¹

Another event that caused backlash was the Santa Barbara oil spill that began on January 28, 1969. In the immediate aftermath, thousands of seabirds died, seals and dolphins were poisoned, and kelp forests were destroyed.¹² The oil kept flowing for a week and a half, and an estimated as much as 4.2 million gallons of oil were spilled.¹³ It was the largest oil spill ever at the time. This massive oil spill changed the way the public and government view fossil fuels. This event got even more attention in the days after the spill. President Richard Nixon visited the site saying, "It is sad that it was necessary that Santa Barbara should be the example that had to bring it to the attention of the American people ... The Santa Barbara incident has frankly touched the conscience of the American people." In the following years, government action was taken. President Nixon signed the National Environmental Policy Act in 1969, which led to the establishment of the Environmental Protection Agency (EPA) in 1970.¹⁴ In the wake of the spill, Santa Barbara also saw the evolution of a more powerful and engaged community of environmentalists. Groups like Get Oil Out! and the

¹¹ "When Our Rivers Caught Fire." *Michigan Environmental Council*

¹² Phillips, Ari. "How A Massive Oil Spill In 1969 Changed Everything." *ThinkProgress*, ThinkProgress, 30 June 2014 <https://thinkprogress.org/how-a-massive-oil-spill-in-1969-changed-everything-c4da7ecd5038/>

¹³ McClam, Eirn. "1969 Oil Spill Near Santa Barbara Was Galvanizing for Environmentalism." *NBCNews.com*, NBCUniversal News Group, 20 May 2015, www.nbcnews.com/news/us-news/1969-oil-spill-near-santa-barbara-was-galvanizing-environmentalism-n361911.

¹⁴ "1969 Oil Spill Near Santa Barbara Was Galvanizing for Environmentalism." *NBCNews.com*

Environmental Defence Center were both founded after the spill. Without environmental protection efforts after the spill, there would have been a lot more oil drilling.¹⁵

Earth Day was began on April 22, 1970, by Wisconsin Senator Gaylord Nelson. It was started as an event to increase public awareness about the world's environmental problems.¹⁶ Earth Day was widely successful in increasing environmental awareness in the United States. In July of the same year, the Environmental Protection Agency was created. "The objective was to get a nationwide demonstration of concern for the environment so large that it would shake the political establishment out of its lethargy," Senator Nelson said, "and finally, force this issue permanently onto the national political agenda." On April 22 1990, the 20th anniversary of the creation of Earth Day, more than 200 million people in 141 countries participated.¹⁷ Nelson's idea was inspired by the anti-war movement when he realized that he could infuse that energy with an emerging public consciousness about the effects of air and water pollution. It would force environmental protection onto the national political agenda. Senator Nelson proclaimed the idea as a "national teach-in on the environment."¹⁸

The Clean Water Act of 1972 was the first major United States law to address water pollution. After events like the Cuyahoga River catching fire, the growing public awareness of the effects of water pollution and the importance of water pollution control led to many amendments in 1972. According to the EPA website, the 1972

¹⁵ "How A Massive Oil Spill In 1969 Changed Everything." *ThinkProgress*

¹⁶ History.com Staff. "The First Earth Day." *History.com*, A&E Television Networks, 2009, www.history.com/this-day-in-history/the-first-earth-day.

¹⁷ "The First Earth Day." *History.com*

¹⁸ "The History of Earth Day." *Earth Day Network*, Earth Day Network , www.earthday.org/about/the-history-of-earth-day/.

amendments:

- Established structure for managing pollutant expulsion into United States water.
- Gave the EPA the authority to put in place pollution control programs.
- Maintained already existing requirements to set water quality standards for any surface water contaminants.
- Made it unlawful for any person to release any pollutant from a point source into waters, unless a permit was obtained.
- Funded the construction of sewage treatment plants.
- Identified the need for planning to address problems caused by nonpoint source pollution.

The Clean Water Act of 1972, signed by President Richard Nixon, continues to be the primary law protecting fresh surface water in the United States.¹⁹ Many more amendments have been added and have changed parts of the Clean Water Act.

However, there has been some controversy over what impact this law has had on the United State's water systems. Nevertheless, there is still proof of the positive effects of this law. According to an Iowa State and Yale University study, large declines in most pollutants targeted by the Clean Water Act can be seen.²⁰ Amounts of dissolved oxygen deficits and bodies of water that are not fishable both decreased almost every year from 1962 through 1990.²¹

“Acid Rain” is a term coined by British chemist Robert Angus Smith in 1872. It

¹⁹ “Clean Air Act Requirements and History.” *EPA*, Environmental Protection Agency, 10 Jan. 2017
<https://www.epa.gov/laws-regulations/history-clean-water-act>

²⁰ Keiser, David A. “Consequences of the Clean Water Act and the Demand for Water Quality*.” *ECON.yale.edu*, pp. 1–90., www.econ.yale.edu/~js2755/CleanWaterAct_KeiserShapiro.pdf.

²¹ “Consequences of the Clean Water Act and the Demand for Water Quality*.” *ECON.yale.edu*,

was first used in his book “Air and Rain: The Beginnings of a Chemical Climatology.”²² Through his 20 year-long research of Britain and Germany’s rain during the industrial revolution, he found very high levels of sulphuric acid present. Acid rain is caused by atmospheric moisture that has been mixed with different elements and gases that cause the moisture to become more acidic than normal.²³ Acid rain can harm fish, animals, plants, and trees. Another concern of acid rain is it can accelerate the weathering process of different buildings and monuments made of stone. It could negatively affect different historically significant monuments and buildings. Amendments to control the pollutants causing acid rain were added in 1970.

The Clean Air Act was legislation passed to control air pollution in the United States. Although it was originally passed in 1963, major amendments were added to it in 1970 and 1990. Amendments to this law were passed at the height of the environmental movement. Dense and visible smog in many of the nation’s industrial cities also helped to prompt the passage of the 1970 amendments. The 1970 revisions were designed to target newly recognized air pollution problems such as damage to the ozone layer and acid rain. According to the EPA website, the Clean Air Act requires the EPA to establish National Ambient Air Quality Standards (also known as NAAQS) for certain common and widespread pollutants based off of the latest science; also known as ‘criteria air pollutants.’ This act also targets other specific provisions;

- Hazardous or toxic air pollutants that pose health risks and environmental threats.

²² “Acid Rain.” *The USGS Water Science School*, USGS, 12 Feb. 2018.

²³ Perlman, Howard, and USGS. “Acid Rain: Do You Need to Start Wearing a Rain Hat?” *Acid Rain*, from *USGS Water-Science School*, USGS Water-Science School, water.usgs.gov/edu/acidrain.html.

- Acid rain, that damages aquatic life, forests and property.
- Chemical emissions that damage the stratospheric ozone layer.
- Regional haze that impairs visibility in national parks and other recreational areas.

Environmental conflicts during the 1960s and 1970s have caused people to make important and effective compromises for the environment. The environmental movement in the 1960s and 1970s is a key factor in modern day environmentalism. The environmental movement in the United States was essential to the creation of many of the most important environmental protection laws such as the Clean Air Act and the Clean Water Act. It can be also be attributed to the creation of many important environmental organizations such as the EPA. Many events in the 1960s and 1970s still prove today that a group of people with the same ambitions and goals can make a difference.

Annotated Bibliography

Primary Sources:

Carson, Rachel L. *Silent Spring*. Houghton Mifflin, 1962.

Rachel Carson was the author of the book "Silent Spring". This was very important to my paper because this book was extremely important to the start of the environmental movement.

"Earth Day 1970 Part 2: Gaylord Nelson's Speech (CBS News with Walter Cronkite)." *Earth Day 1970 Part 2: Gaylord Nelson's Speech (CBS News with Walter Cronkite)*, Earth Day Network , 11 Apr. 2011, www.youtube.com/watch?list=PL3480E41AA956A42B&time_continue=78&v=y3RCPAtmpv8.

This was Senator Gaylord Nelson's speech from the first Earth Day. I used this to compare what the original motives of the start of Earth Day were and how it has improved in the modern day.

Meadows , Donella H., et al. *Limits to Growth*. POTOMAC ASSOCIATES, 1972.

"Limits to Growth" was another book released during the height of the environmental movement. This helped me write my paper because it gave me information of what people were trying to change.

" Pesticides - DDT - Rachel Carson - Silent Spring." *Pesticides - DDT - Rachel Carson - Silent Spring*, 18 Apr. 2013, www.youtube.com/watch?v=lpbc-6lvMQI.

This was an interview conducted with Rachel Carson regarding her book "*Silent Spring*." This was helpful to me because in my research, sometimes there was skewed information about her viewpoints and this helped clarify what those were.

"Rachel Carson CBS Reports." *Rachel Carson CBS Reports*, CBS, 29 Nov. 2014, www.youtube.com/watch?v=8nriVjC0H8I.

This was another interview with Rachel Carson about her book "*Silent Spring*." This was helpful because it gave me insight on her thoughts about the book and pollution.

Randy Newman. "Burn On." Record Plant, California, 10 Nov. 1974.

Randy Newman is the musician responsible for the song Burn On, written about the Cuyahoga River fire. This was important in my research because it helped me understand the importance of artists to the environmental movement.

Richard Nixon: "Statement on Coastal Oil Pollution at Santa Barbara, California.," February 11, 1969. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*.
<http://www.presidency.ucsb.edu/ws/?pid=2330>.

This is the statement Richard Nixon released regarding the Santa Barbara oil spill. This was important to my paper because I got to read about what the government said they would do to help the effects of the oil spill.

"1970: The First Earth Day in New York City." CBS, 22 Apr. 2011,
www.youtube.com/watch?v=nEmARFci_I.

This was a clip from a CBS news broadcast in New York about the first Earth Day. It was important to my paper because this clip along with the one from Philadelphia helped me recognize how big this event was and how we participate has changed.

"1970: The First Earth Day in Philadelphia." CBS, 22 Apr. 2011,
www.youtube.com/watch?v=5v_2nTvAcSU.

This was a clip from a CBS news broadcast in Philadelphia about the first Earth Day. This was important to the writing of my paper because, like the news clip from New York, it helped me recognize how big this event was.

Schwab, Jim. "Green Justice." *Nation*, vol. 258, no. 6, 14 Feb. 1994, pp. 207-210.

Jim Schwab is the author of the book *Green Justice*. This was important to my paper because it helped to recognize more of the feelings of the people involved in the environmental movement.

“The 1969 Santa Barbara Oil Spill.” *FOX 11 Archives: The 1969 Santa Barbara Oil Spill*, FOX 11 Archives, 21 May 2015, www.youtube.com/watch?v=qNQe86IOSdA.

This is a clip from a news broadcast released after the 1969 Santa Barbara oil spill. This helped me understand the immediate shock and aftermath of this tragedy.

United States, Congress, *A Legislative History of the Clean Air Amendments of 1970, Together with a Section-by-Section Index*. 1972. U.S. Govt. Print. Off. Congress. <https://www.gpo.gov/fdsys/pkg/STATUTE-84/pdf/STATUTE-84-Pg1676.pdf>

These were the amendments added to the Clean Air Act in 1970. This was important to my paper because I was able to find and read about the amendments without having anything cut out.

United States, Congress, *Legislative History of the Water Pollution Control Act Amendments of 1972: Together with a Section-by-Section Index*. 1973. U.S. G.P.O. Congress. <https://www.gpo.gov/fdsys/pkg/USCODE-2010-title33/pdf/USCODE-2010-title33-chap26.pdf>

These were the amendments added to the Clean Water Act in 1972. This was important to my paper because I could read the actual amendments added, and not just overviews of them.

Secondary Sources:

“Clean Air Act Requirements and History.” *EPA*, Environmental Protection Agency, 10 Jan. 2017

<https://www.epa.gov/laws-regulations/summary-clean-air-act>

This talks about the Clean Air Act. This was important to my paper because it talked about how the Clean Air Act benefited the United States and about the amendments.

Griswold, Eliza. "How 'Silent Spring' Ignited the Environmental Movement." *The New York Times*, The New York Times, 21 Sept. 2012, www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html.

This was an article explaining what impact Rachel Carson's book "*Silent Spring*" had on the environmental movement. This website helped me write my paper because it gave me more insight into how important this book was to the environmental movement.

History.com Staff. "The First Earth Day." *History.com*, A&E Television Networks, 2009, www.history.com/this-day-in-history/the-first-earth-day.

This article explained the first Earth Day. It gave me information on how it started, and it helped me understand how much this event has impacted the world.

Keiser, David A. "Consequences of the Clean Water Act and the Demand for Water Quality" *ECON.yale.edu*, pp. 1–90., www.econ.yale.edu/~js2755/CleanWaterAct_KeiserShapiro.pdf.

This was a study conducted about the Clean Water Act and how successful it was. This was very important in my research, because it helped me realize even though the Clean Water Act has had a positive impact, it still has flaws.

McClam, Eirn. "1969 Oil Spill Near Santa Barbara Was Galvanizing for Environmentalism." *NBCNews.com*, NBCUniversal News Group, 20 May 2015, www.nbcnews.com/news/us-news/1969-oil-spill-near-santa-barbara-was-galvanizing-environmentalism-n361911.

This was an article from NBC about the Santa Barbara oil spill in 1969. This helped me write my paper because it gave me information about the aftermath of the oil spill.

McDiarmid, Hugh. "When Our Rivers Caught Fire." *Michigan Environmental Council*, Michigan Environmental Council, July 2011

https://www.environmentalcouncil.org/when_our_rivers_caught_fire

This website has information on how the Cuyahoga River caught on fire in 1969. This was important because it talked about how much pollution was in the Great Lakes, why there was so much pollution, and why the Cuyahoga River fire of 1969 was important in particular.

Perlman, Howard, and USGS. "Acid Rain: Do You Need to Start Wearing a Rain Hat?" *Acid Rain, from USGS Water-Science School*, USGS Water-Science School, water.usgs.gov/edu/acidrain.html.

This website talks about what acid rain is and how it affects the environment. This was important for my paper because I learned about why acid rain affects the environment.

Phillips, Ari. "How A Massive Oil Spill In 1969 Changed Everything." *ThinkProgress*, ThinkProgress, 30 June 2014
<https://thinkprogress.org/how-a-massive-oil-spill-in-1969-changed-everything-c4da7ecd5038/>

This website talks about the Santa Barbara oil spill in 1969. This was important because it included bits from interviews from people living in Santa Barbara at the time and that helped me understand how terrible the situation was.

"The Development of the Industrial United States (1870-1900)." *Smithsonian The National Museum of American History*, National Museum of American History, americanhistory.si.edu/presidency/timeline/pres_era/3_657.html.

This article talks about the rise and development of industry in the 19th century. This was very important to my research because I learned more about where the environmental problems were stemming from.

"The History of Earth Day." *Earth Day Network*, Earth Day Network, www.earthday.org/about/the-history-of-earth-day/.

This website had information about the first Earth Day. It helped me write my paper because it helped me understand a little bit more about why Earth Day was such a big deal at the time.