



Human beings influence events all over the world. When human actions have a negative impact on the environment, many people must work to help restore it. Their actions can make a big difference.

- I always wanted to take care of animals, so I studied to be a veterinarian. My studies led me to a special interest in chimpanzees.
- Working to protect this species is one way I can have a positive impact on the world.

Talk About It



Write words you have learned about making a difference. Then talk about actions you have taken that have had an impact on the world.



Vocabulary

Use the picture and the sentences to talk with a partner about each word.



Ships transport many goods made for **export** overseas.

What goods might be produced for export to other countries?



The **glistening** wrapping paper made the gift look really special.

What other materials create a glistening effect?



Mrs. Garcia pointed out information that could **influence** Anna's voting decision.

Who might influence your decisions each day?



From our cabin, we see a **landscape** of mountains, trees, and a clear blue lake.

What landscape would you like to visit?

Penguins are **native** to Antarctica.

What animals are native to your state or area?



Flying over the land, we had a view of farms and **plantations** below.

What kinds of things are grown on plantations?



The upholsterer worked to **restore** the antique chair to its original condition.

What else might you restore by repairing?



My mom **urged** my baby brother to eat his food.

What kinds of foods are growing children urged to eat?

Your Turn



Pick three words. Write three questions for your partner to answer.

Go Digital! Use the online visual glossary



Sometimes, the quietest voice can spark the most clamorous outrage. Combining her love of nature with a belief in scientific accuracy, the soft-spoken writer Rachel Carson raised awareness about environmental issues. As a result, the U.S. government strengthened the rules and regulations regarding the use of chemical pesticides. Many people consider Rachel's book *Silent Spring* the foundation of today's environmental movement.

Early Influences

Rachel was born in Springdale,
Pennsylvania, in 1907. Throughout
her childhood, her mother
encouraged her to explore the
landscape surrounding the
family's farm. Often equipped with
binoculars, Rachel developed a love
of nature that affected many of her
decisions. For example, she first
chose to study English literature
and writing when she went to
college. However, she later decided
to study biology. While studying at

■ Rachel preferred working alone as she gathered information.

a marine laboratory, she became fascinated by the **glistening** and shimmering seascape.

From an early age, Rachel had loved to write. These writing skills proved useful to her career. She began by creating radio programs for the U.S. Bureau of Fisheries. She then became an editor and librarian for the agency. While she was working, she submitted her own articles to newspapers and magazines. Rachel eventually published three books about the ocean and its **native** plants and animals. This trilogy included *Under the Sea-Wind, The Sea Around Us,* and *The Edge of the Sea.*

Rachel supported her ideas with well-researched facts.





Rachel Carson's research revealed that DDT caused damage to birds and eggs.

A Call to Action

The success of Rachel's books allowed her to devote more time to her own projects. She built a cottage close to the sea on the coast of Maine. Soon, however, a letter arrived from some old friends, Olga and Stuart Huckins. They described problems resulting from the spraying of DDT on their private wildlife sanctuary. Chemical companies had developed DDT as an effective solution to crop-eating insects on farms and **plantations**. At the Huckins's sanctuary. however, the chemical also seemed to be harming birds.

In response, Rachel hired assistants to help research the Huckins's claim. Worried by the slow pace of their work, she decided to continue alone. By publishing her findings, she hoped

to warn about the dangers of these new chemicals. In order to dramatize the situation, she **urged** readers to imagine a world without songbirds. The book's title, *Silent Spring*, describes this possible result of pesticide abuse.

Silent Spring prompted readers to raise their voices in unison against the chemical corporations. They demanded an investigation into pesticides and implored the government to restrict their use. In response, President John Kennedy created a Congressional committee to study the matter. Rachel testified before this group and provided facts and information to **influence** its decisions.

Though a pesticide may target insects, animals can also feel its effects.

Sample Food Chains **TROPHIC GRASSLAND OCEAN LEVEL BIOME** BIOME **Primary** phytoplankton grass **Producer Primary** grasshopper zooplankton Consumer Secondary fish Consumer **Tertiary** snake seal Consumer

A Strong Reaction

Meanwhile, the chemical companies struggled to counter Rachel's claims. Despite her reasonable approach to the problem, they tried to depict her accusations as irrational. They published articles and reports that mocked her writing style and belittled her ideas. Advertisements on television proclaimed the safety of their products. When these ads did not change public opinion, they pulled financial support from programs that featured Rachel.

Rachel worried that once pesticides poisoned an area, it might be impossible to **restore** the

Carson understood the power her words had to educate others, especially children.

environment to its original state.

"Man's attitude toward nature is today critically important simply because we have now acquired a fateful power to alter and destroy nature," she said in an interview. Her testimony led to restrictions on certain pesticides in the United States. Even so, chemical companies continued to produce them for **export** to other countries.

Rachel Carson died shortly after Silent Spring was published, but her voice survives within her books. Her love of nature endures, along with her quiet desire to preserve and protect the natural world.

Make Connections

What impact did the publication of *Silent Spring* have on the makers of pesticides such as DDT? **ESSENTIAL QUESTION**

Think about a time when you wrote or spoke about something that needed to change. What impact did your words have?

TEXT TO SELF