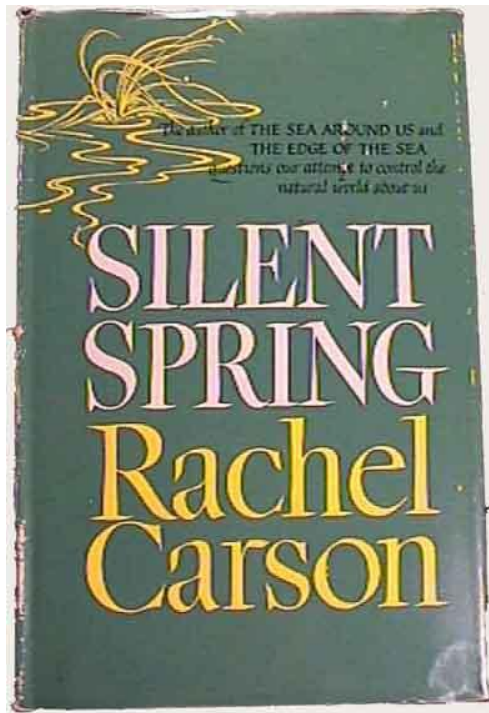




AP Photo

## The Noisy Response to *Silent Spring*, 1963



In 1962 nature writer Rachel Carson published *Silent Spring*, a powerful indictment on the dangers of the excessive use of pesticides. Her work helped ignite an emerging environmental movement.

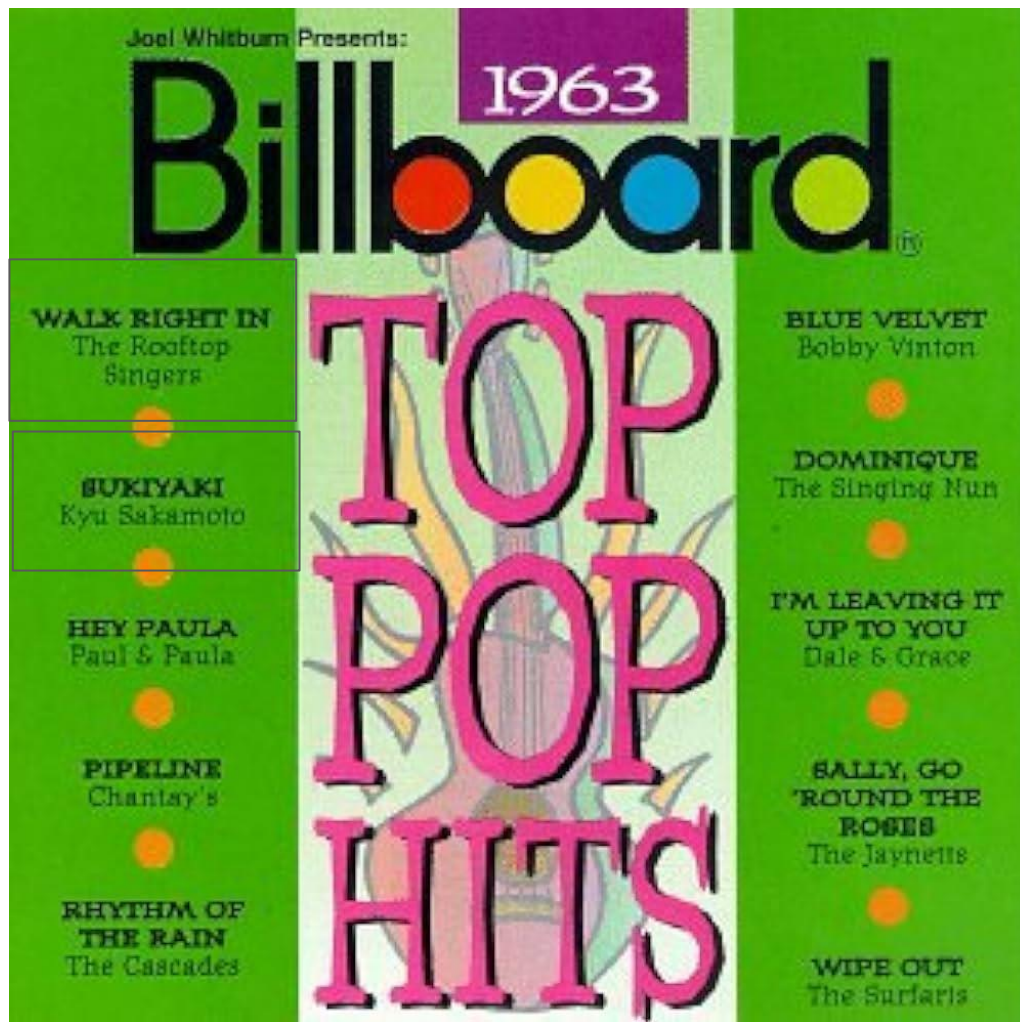


Carson would later be named as one of the most influential "Persons of the Century" by *TIME* magazine:

"Nearly 40 years later, [*Silent Spring*] is still regarded as the cornerstone of the new environmentalism. Carson was not a born crusader but an intelligent and dedicated woman who rose heroically to the occasion. She was rightly confident about her facts as well as her ability to present them. Secure in the approval of her peers, she remained remarkably serene in the face of her accusers."

In 2020, *Time* reimagined its annual iconic cover image for 1963, supposing Carson had been named "Woman of the Year."

Let's step back  
in time to 1963...



*Click on any  
title to listen  
on YouTube*

Walk Right In

WALK RIGHT IN  
The Rooftop  
Singers

BLUE VELVET  
Bobby Vinton

Blue Velvet

Sukiyaki

SUKIYAKI  
Kyu Sakamoto

DOMINIQUE  
The Singing Nun

Dominique

Hey Paula

HEY PAULA  
Paul & Paula

I'M LEAVING IT  
UP TO YOU  
Dale & Grace

I'm Leaving It  
Up to You

Pipeline

PIPELINE  
Chantay's

SALLY, GO  
'ROUND THE  
ROSES  
The Jaynetts

Sally, Go 'Round  
the Roses

Rhythm of  
the Rain

RHYTHM OF  
THE RAIN  
The Cascades

WIPE OUT  
The Surfaris

Wipe Out



## *In the news...*



Sept. 30, 1962 — Chief U.S. Marshal James McShane and Assistant Attorney General for Civil Rights John Doar guard James Meredith from harm, as Federal marshals under direction of President John F. Kennedy, arrive at the University of Mississippi ("Ole Miss") to allow Meredith admission, against actions by the University and governor, and with much student protest.



May 16, 1963 — Gordon Cooper completes the longest manned Mercury spaceflight: 34 hrs, 40 mins.



June 19, 1963 — Russian Valentina Tereshkova is the first woman in space, doubling Cooper's time. The space race is emblematic of political tensions between the U.S. and the U.S.S.R.



July 25, 1963 — The United States, United Kingdom, and the U.S.S.R. sign a Nuclear Test Ban Treaty -- outlawing atmospheric testing. The fifteenth and last nuclear test occurred last year.

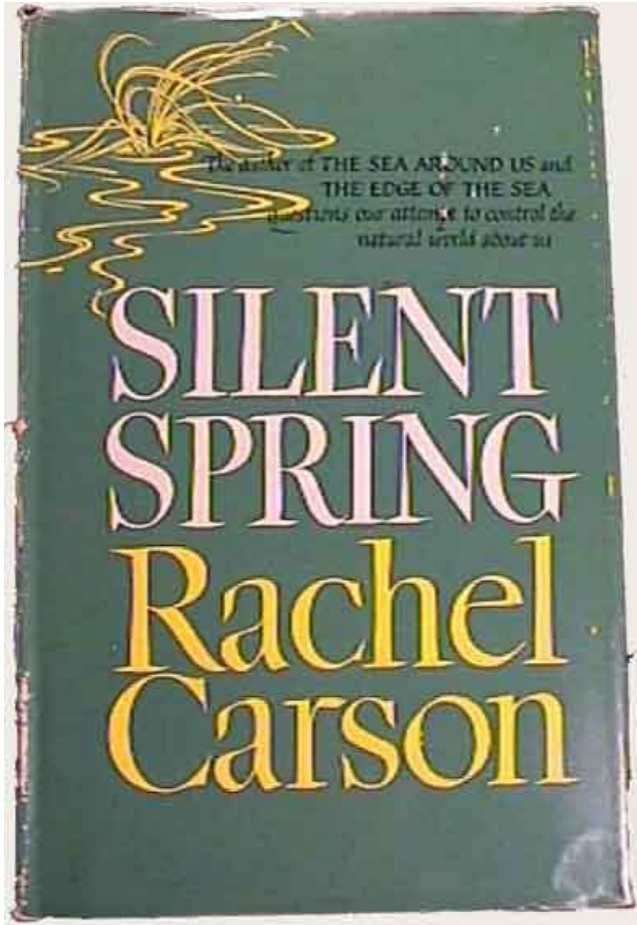




Aug 30, 1963 — Following the Cuban missile crisis last year, a new Washington-Moscow hotline opens to reduce the risk of unintended war between the two superpowers.

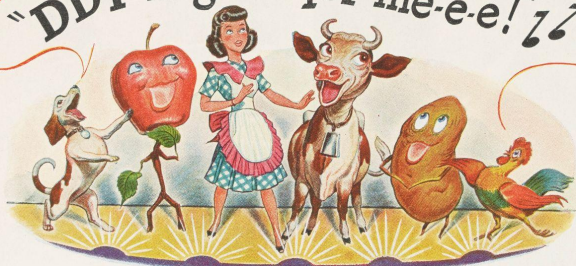


Aug 28, 1963 — A civil rights march in Washington DC. draws 200,000 participants. The Reverend Martin Luther King, Jr. speaks, "I Have a Dream."



September, 1963 — It has been a year since nature writer Rachel Carson published her book *Silent Spring* on the dangers of the excessive use of pesticides. Controversy fills the media. *What scientific claims should we accept?*

"DDT is good for me-e-e!"



The great expectations held for DDT have been realized. During 1946, exhaustive scientific tests have shown that, when properly used, DDT kills a host of destructive insect pests, and is a benefactor of all humanity.

Pennsalt produces DDT and its products in all standard forms and is now

one of the country's largest producers of this amazing insecticide. Today, everyone can enjoy added comfort, health and safety through the insect-killing powers of Pennsalt DDT products . . . and DDT is only one of Pennsalt's many chemical products which benefit industry, farm and home.



**GOOD FOR STEERS**—Beef grows meatier nowadays . . . for it's a scientific fact that—compared to untreated cattle—beef-steers gain up to 50 pounds extra when protected from horn flies and many other pests with DDT insecticides.



**GOOD FOR FRUITS**—Bigger apples, juicier fruits that are free from unsightly worms . . . all benefits resulting from DDT dusts and sprays.



**KNOX FOR THE HOME**—helps **Knock Out** to make healthier, more comfortable homes . . . protects your family from dangerous insect pests. Use **Knock-Out DDT Powders and Sprays** as directed . . . then watch the bugs "bite the dust"!



**GOOD FOR ROW CROPS**—25 more barrels of potatoes per acre . . . actual DDT tests have shown crop increases like this! DDT dusts and sprays help truck farmers pass these gains along to you.



**KNOX FOR DAIRIES**—Up to 20% more **Knock Out** milk . . . more butter . . . more cheese . . . tests prove greater milk production when dairy cows are protected from the annoyance of many insects with DDT insecticides like **Knock-Out Stock and Barn Spray**.



**KNOX FOR INDUSTRY**—Food processing plants, laundries, dry cleaning plants, hotels . . . dozens of industries gain effective bug control, more pleasant work conditions with Pennsalt DDT products.

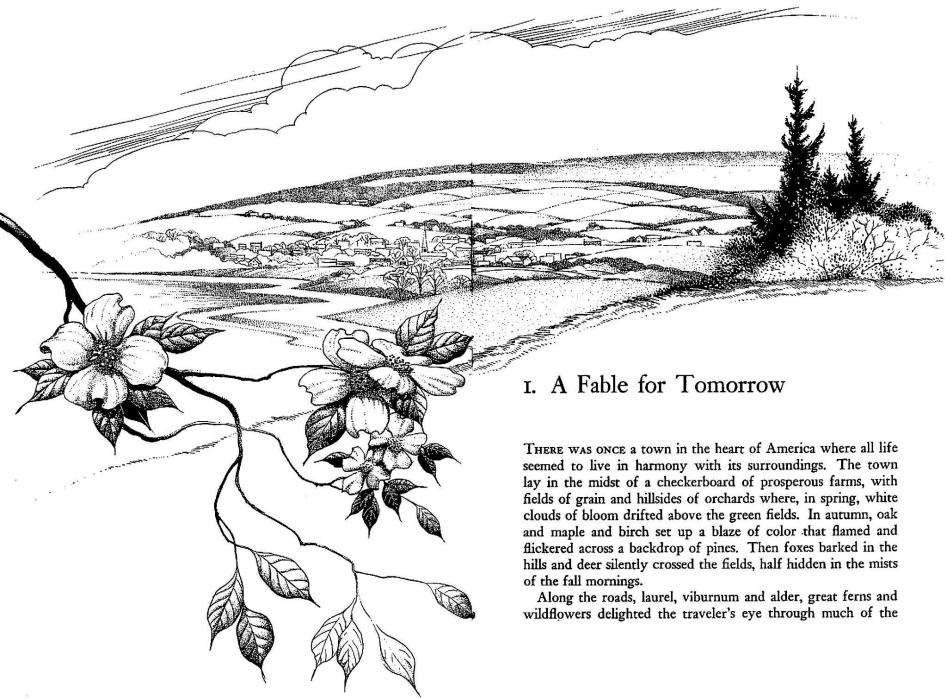
**PENN SALT**  
CHEMICALS

97 Years' Service to Industry • Farm • Home

PENNSYLVANIA SALT MANUFACTURING COMPANY  
WIDENER BUILDING, PHILADELPHIA 7, PA.

The chemical industry has for many years been promoting the value and safety of pesticides, such as DDT.





### I. A Fable for Tomorrow

THERE WAS ONCE a town in the heart of America where all life seemed to live in harmony with its surroundings. The town lay in the midst of a checkerboard of prosperous farms, with fields of grain and hillsides of orchards where, in spring, white clouds of bloom drifted above the green fields. In autumn, oak and maple and birch set up a blaze of color that flamed and flickered across a backdrop of pines. Then foxes barked in the hills and deer silently crossed the fields, half hidden in the mists of the fall mornings.

Along the roads, laurel, viburnum and alder, great ferns and wildflowers delighted the traveler's eye through much of the



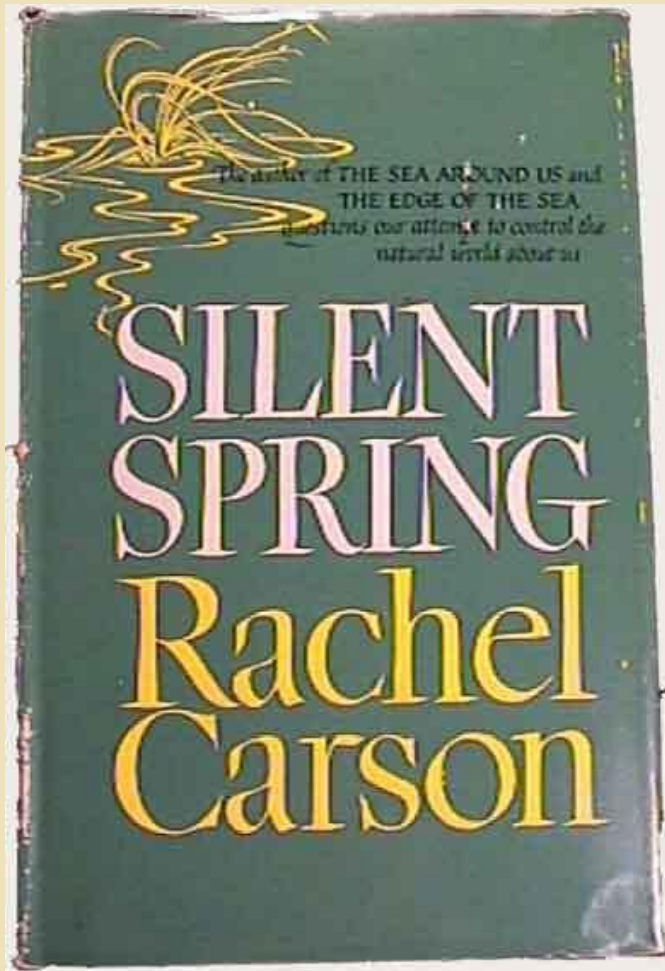
## The Desolate Year

Does the world really need chemical pesticides? Are these compounds (used to control insects, rodents, weeds, parasites and plant diseases) better left alone? Is the public being sold a monstrous "bill of goods"?

The answers to those questions could be learned with finality by seeing what would happen if pesticides were not available. Imagine, then, that by some incomprehensible turn of circumstances, the United States were to go through a single year completely without pesticides. It is under that license that we take a hard look at that desolate year, examining in some detail its devastations.

Consumers are now presented with two contrasting views. On the one hand, Carson describes the threats to wildlife and human health. On the other, the chemical industry warns against loss of crops and the rise of insect-borne diseases. Both claim to speak for science.

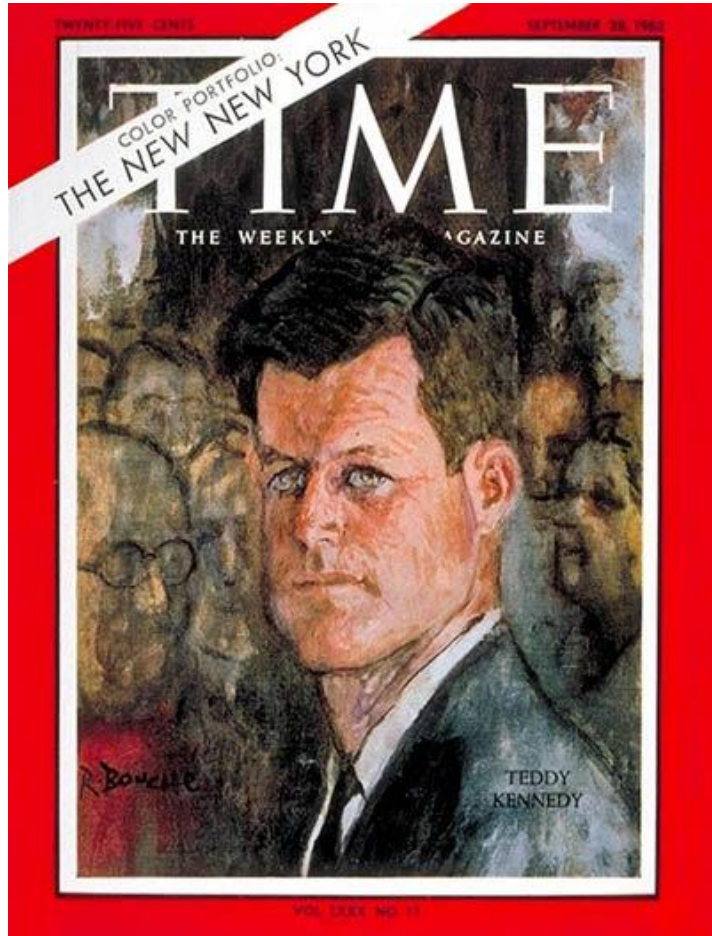
***Whose claims should we accept?***



The National Research Council has convened a panel on pesticides and wildlife relationships. And President Kennedy has asked his Science Advisory Committee to issue a report.

But let's consider various book reviews that you could easily find in the media.

***Make a short list of things you might be looking for in these reviews.***



*TIME* magazine presents an assessment (that will contrast starkly with their judgment 40 years later):

“Many scientists sympathize with Miss Carson's love of wildlife, and even with her mystical attachment to the balance of nature. But they fear that her emotional and inaccurate outburst in *Silent Spring* may do harm by alarming the nontechnical public, while doing no good for the things that she loves.”

The book contains many “oversimplifications and downright errors.” Carson's claims are “unfair, one-sided, and hysterically overemphatic.”

Sir: Granted Rachel Carson, in her new book *Silent Spring*, presents only one side of the chemical poison use controversy.

Need TIME [Sept. 28] belittle her efforts on behalf of mankind? The chemical manufacturers have presented the "other side" of the controversy to the public so effectively that highly toxic pesticides are now used as carelessly as foot powder. TIME should have cheered Miss Carson's efforts to alert the public to pesticide dangers, and seconded her motion to step up research to discover target-specific, short-life pesticides and non-chemical pest controls, the use of which would assure that America will never have a "silent spring."

THOMAS L. KIMBALL  
Executive Director  
National Wildlife Federation  
Washington, D. C.

Sir: Thank you for allaying the fears of at least one member of the nontechnical and impressionable public. After reading installments of Miss Carson's book in a magazine last June, I was so struck with horror that I threw out all my insecticides and sprays. All summer long I had thrips on the grapevine, ants in the kitchen, and bugs at my barbecues.

(MRS.) VICKI PATTERSON  
West Newton, Mass.

Sir: As a California citrus grower, I am in a position to know that nowhere in the world is the consumer so thoroughly protected from harmful residual chemicals as in the U.S. A pox on authors who will pervert the truth for a few lousy bucks.

GEORGE BROOMELL  
Tustin, Calif.

Sir: Most scientists with whom I have spoken are of the opinion that Miss Carson used facts in her book, although they undoubtedly were carefully selected to promote her point of view. Apparently it was her candid opinion that the pesticide situation would never reach the public unless she used Madison Avenue tactics.

No clear-thinking scientist is going to suggest eliminating the use of pesticides. However, they are going to pay more attention to weighing the pros and cons of elm v. robin type questions. Miss Carson has done her job well--stimulating thought, discussion and controversy.

PATRICK R. DUGAN  
Microbiological and Biochemical  
Center. Syracuse University  
Research Corp.  
Syracuse, N.Y.





Neil Diamond, science writer

Review for *The Saturday Evening Post*

“The Myth of the Pesticide Menace.”



Neil Diamond  
(science writer)

Review for *The Saturday Evening Post*  
"The Myth of the 'Pesticide Menace' "

"An emotional, alarmist book"

"Thanks to a woman named Rachel Carson, a big fuss has been stirred up to scare the American public out its wits."

"the attention-getting quality inherent in any exaggeration"

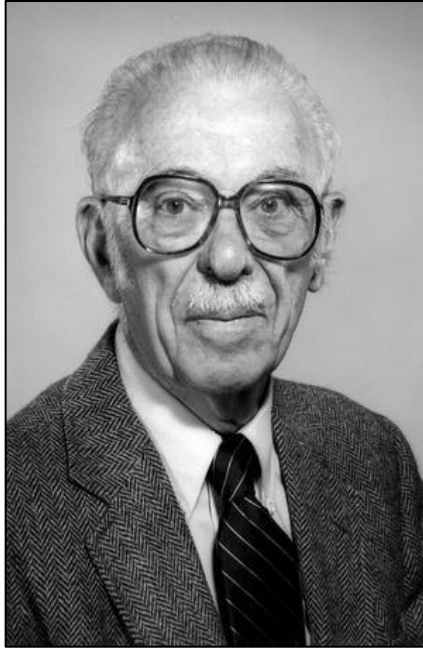
"It was just what the American public wanted to hear. No matter that Miss Carson's conclusions were preconceived, no matter that her arguments were more emotional than accurate. *Silent Spring* became a bestseller and conversational fad."

---

In the byline, Diamond is profiled as an original collaborator with "Miss Carson." but apparently having disagreed with her approach, discontinued. In fact, Diamond declined to complete the research that Carson planned, and he was asked to withdraw.



Robert White-Stevens  
(chemist)



Thomas Jukes  
(biochemist)



William Darby  
(nutritionist)

**representatives of the chemical industry**  
writing in *Chemical Week* and *Chemical and Engineering News*



Robert White-Stevens  
(chemist, American  
Cyanamid Corp.)

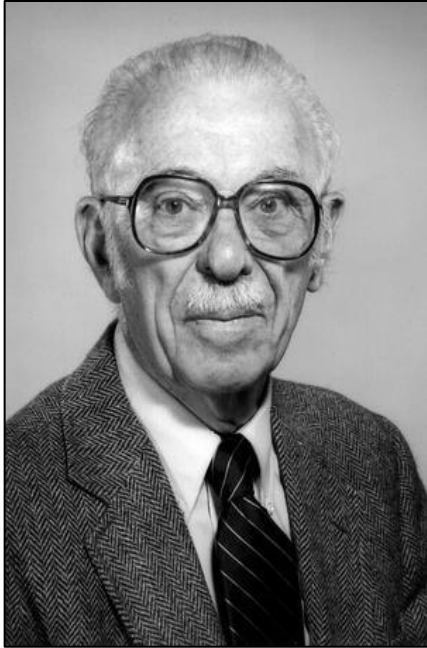
comments on *CBS Reports*  
documentary

"Miss Carson maintains that the balance of nature is a major force in the survival of man, whereas the modern chemist, the modern biologist, the modern scientist believes that man is steadily controlling nature."

"The major claims in Miss Rachel Carson's book, *Silent Spring*, are gross distortions of the actual facts, completely unsupported by scientific experimental evidence, and general practical experience in the field."

"The real threat then to the survival of man is not chemical but biological, in the shape of hordes of insects that can denude our forests, sweep over our crop lands, ravage our food supply and leave in their wake a train of destitution and hunger, conveying to an undernourished population the major diseases and scourges of mankind. If man were to follow the teachings of Miss Carson, we would return to the Dark Ages, and the insects and diseases and vermin would once again inherit the earth."





Thomas Jukes  
(biochemist, American  
Cyanamid Corp.)

1963 article in *American Scientist*

DDT is able control many diseases, including malaria, typhus, dengue, plague, and cholera. The harms are negligible. People who worry about pesticides in their food and the environment are “alarmist.”

"Progress in American agriculture must not become ... hamstrung by legislation resulting from inaccurate statements regarding the dangers of pesticides. The right to publish confers the obligation to tell the story without distortion, omission, misquotation, or innuendo. ... At stake is no less than the protection of the free world from hunger and disease,"



William Darby  
(nutritionist, Vanderbilt  
School of Medicine)

review for *Chemical and Engineering News*  
"Silence, Miss Carson"

"The public may be misled by this book." It will appeal to "those readers who are as uncritical as the author," such as "organic gardeners, the antiflouride leaguers, the worshipers of 'natural foods,' those who cling to the philosophy of a vital principal, and pseudo-scientists and faddists."

Miss Carson's "ignorance or biases on some of the considerations throws doubt on her competence to judge policy."

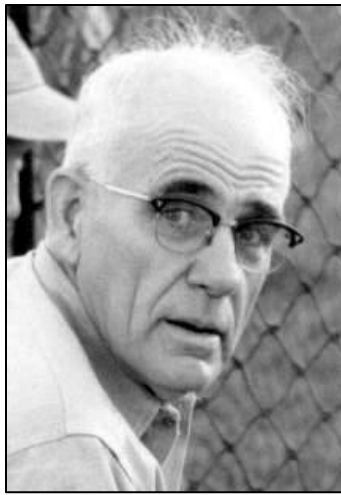
Banning pesticides would mean "disease, epidemics, starvation, misery and suffering incomparable and intolerable to modern man."

"The responsible scientist should read this book to understand the ignorance of those writing on the subject and the educational task which lies ahead."



Lamont Cole  
(ecologist)

*Scientific American*



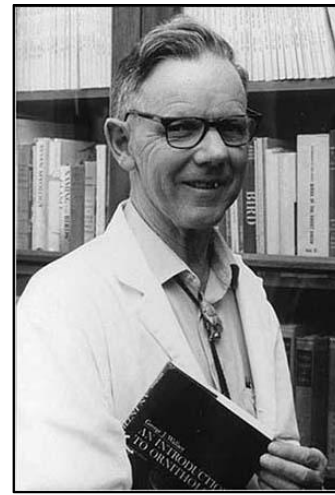
Clarence Cottam  
(wildlife biologist)

*Sierra Club Bulletin*



Robert Rudd  
(entomologist &  
textbook author)

*Pacific Discovery*



George Wallace  
(zoologist)

*Cranbrook Inst. of  
Science Bulletin*



Roland Clement  
(naturalist)

*Audubon*

**biologists**  
reviewing *Silent Spring* for a popular audience



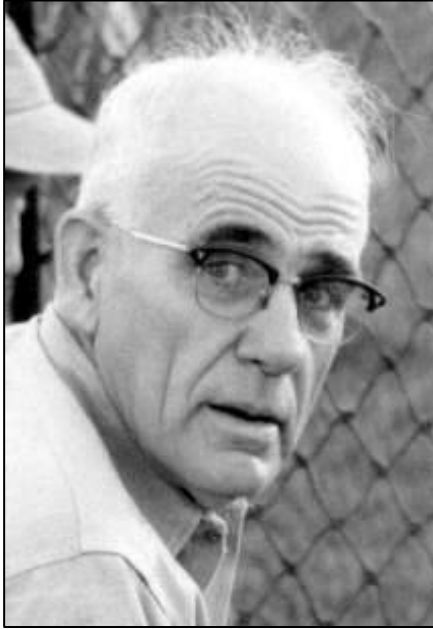
Lamont Cole  
(ecologist)

review for *Scientific American*

"Rachel Carson's indictment of the wide use of pesticides"

"As an ecologist, I am glad this provocative book has been written. That is not to say I consider it a fair and impartial appraisal of all the evidence." However, "the extreme opposite has been impressed on the public by skilled professional molders of public opinion." ... "Errors of fact are so infrequent, trivial and irrelevant to the main themes that it would be ungallant to dwell on them."

"Anyone will recognize this is an argument that is bound to arouse the ire of powerful elements in our society." ... "Where does the truth lie? It lies in part with Miss Carson, who presents enough solidly established facts to justify some alarm."



Clarence Cottam  
(wildlife biologist)

review for *Sierra Club Bulletin*  
"A Noisy Reaction to *Silent Spring*"

"No book since Harriet Beecher Stowe's *Uncle Tom's Cabin* has stirred the American public or Washington officialdom as this beautifully written and well documented appraisal of the pesticide problem."

"It is not surprising that the most extreme reactions against this skillfully and effectively written document have come from those whose purse strings and employment are threatened." ... "Some in the field of economic entomology, particularly those who receive financial support directly, or for their laboratories, have been violent in their opposition to the book." ...

"In the vigorous campaign against *Silent Spring*, the philosophy seems to exist that it makes little difference what line of attack is followed if only the book is condemned."





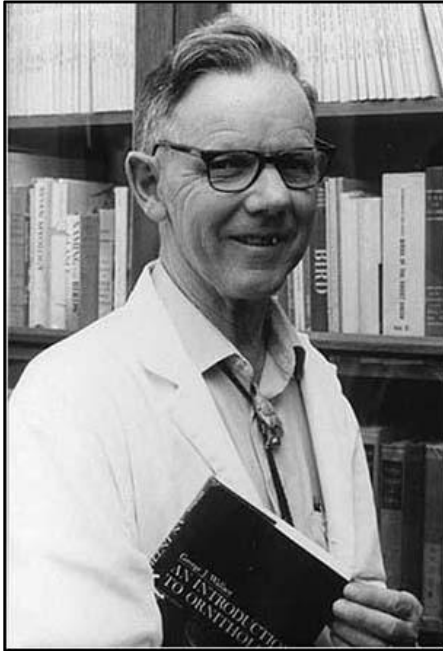
Robert Rudd  
(entomologist & author of  
the textbook *Pesticides  
and the Living Landscape*)

review for *Pacific Discovery*  
"The Chemical Countryside"

"We have cause to suspect that the products of our technology may be unwisely applied, and in the long run harm us more than help us."

"*Silent Spring* is a credit to its writer. But while conceding her literary abilities, her critics challenge her technical competence. ... Are the correct?" ... "In my opinion she is eminently qualified to present the facts, synthesis and argument."

"*Silent Spring* is not just another fine literary work of the sort we expect from Miss Carson. It is, as well, biological warning, social commentary, and moral reminder. Insistently, she calls upon technological man to pause and take stock."



George Wallace  
(zoologist)

*Cranbrook Institute Bulletin #41*

"Bird Mortality in the Dutch Elm Disease Program in Michigan"

"From the evidence submitted in this report it should be clear that mortality to birds has been high in many of the control programs designed to protect Dutch elms from disease."

"Though it is not within the scope of this report to criticize or evaluate the earnest efforts of operators or administrators to try to save the valuable elm trees, we are inclined to question the whole program ... on ecological grounds. Any program which destroys 80 or more species of birds and unknown numbers of beneficial predatory and parasitic insects needs further study."



Roland Clement  
(naturalist)

review (and related commentaries) for *Audubon* magazine

"This disarmingly eloquent book by one of America's favorite science writers is a two-fisted indictment of our modern devotion to the technological solution of man's problem in pushing nature to yield him more and more and more."

"Miss Carson's book is more than a compilation of facts and figures, the blunders and the near misses involved in the use of pesticides these past 15 years and more. It is a thoughtful questioning of the impact of these poisonous materials on the fabric--that web of life--which has to this day made our earth productive."



Ira Baldwin  
(agricultural bacteriologist),

reviewed Carson's book for the prestigious  
research journal, *Science*

**Chair of the National Research Council Committee  
on Pest Control and Wildlife Relationships**



Ira Baldwin  
(agricultural bacteriologist)  
Chair of the National Research  
Council Committee on Pest  
Control and Wildlife Relationships

review for the research journal, *Science*  
"Chemicals and Pests"

"*Silent Spring* is superbly written and beautifully illustrated with line drawings. The author has made an exhaustive study of the facts bearing on the problem [of pesticides]. It is not, however, a judicial review or a balancing of the gains and losses; rather, it is the prosecuting attorney's impassioned plea for action against the use of these new materials which have received such widespread acceptance, acceptance accorded because of the obvious benefits their use has conferred."

"The story of *Silent Spring*, so well told by Rachel Carson, even though it presents only one side of a very complex problem, will serve a useful purpose, if research on better methods of pest control are stimulated and if all concerned with the production, control and use of pesticides are stimulated to exercise greater care in the protection of the public welfare."





## ***CBS Reports*** **investigative TV journalism**

interviews with:

- White-Stevens (speaking on behalf of the chemical industry)
- Luther Terry (Surgeon General)
- George Larrick (Food and Drug Administration)
- Orville Freeman (Secretary of Agriculture)
- others from the Public Health Service and the U.S. Fish and Wildlife Research Center
- Rachel Carson

aired April 3, 1963

Available on [YouTube](#)



*CBS Reports*  
"The Silent Spring of  
Rachel Carson"

The program begins by reviewing the various uses and the obvious benefits of synthetic pesticides, and the general safety of crop foods (under allowable residue limits) sold at grocers.

Carson then presents her concerns about: agricultural workers and consumers exposed the chemicals without proper cautions; the cumulative effect of repeated exposure; the detrimental effect on beneficial insects, such as pollinators; the poisoning of aquatic life and, through the food chain, birds. She also draws attention to the development of pesticide-resistant insects through natural selection.

The program tries to assess the scale of the problem. They note annual deaths attributed to pesticide poisoning, and the 137 insects know to be resistant to some pesticide. At the same time, they dispel the nightmarish images sometimes associated with Carson's claims.

In general, they confirm Carson's basic cautionary message and emphasize the need for more research and better government regulation.



*CBS Reports*  
"The Silent Spring of  
Rachel Carson"

**Robert White-Stevens** (quoted earlier, for the chemical industry)

**George Larrick** (Food and Drug Administration)

The book "causes all of us to take a new look at our responsibilities."  
He acknowledges that current controls are not "truly sufficient."

**Orville Freeman** (Secretary of Agriculture)

acknowledges that prior to the book, the public had not been  
adequately alerted to the various dangers of pesticides.

**John Buckley** (U.S. Fish & Wildlife Research Center)

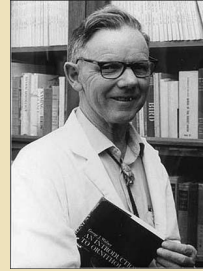
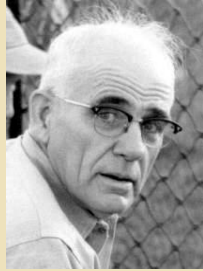
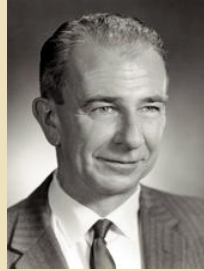
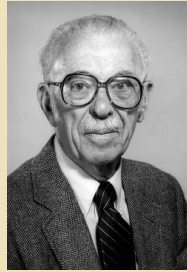
"There is no doubt that the use of pesticides has resulted in extensive  
damage to wildlife." Harms to birds are well documented.

**Page Nicholson** (U.S. Public Health Service)

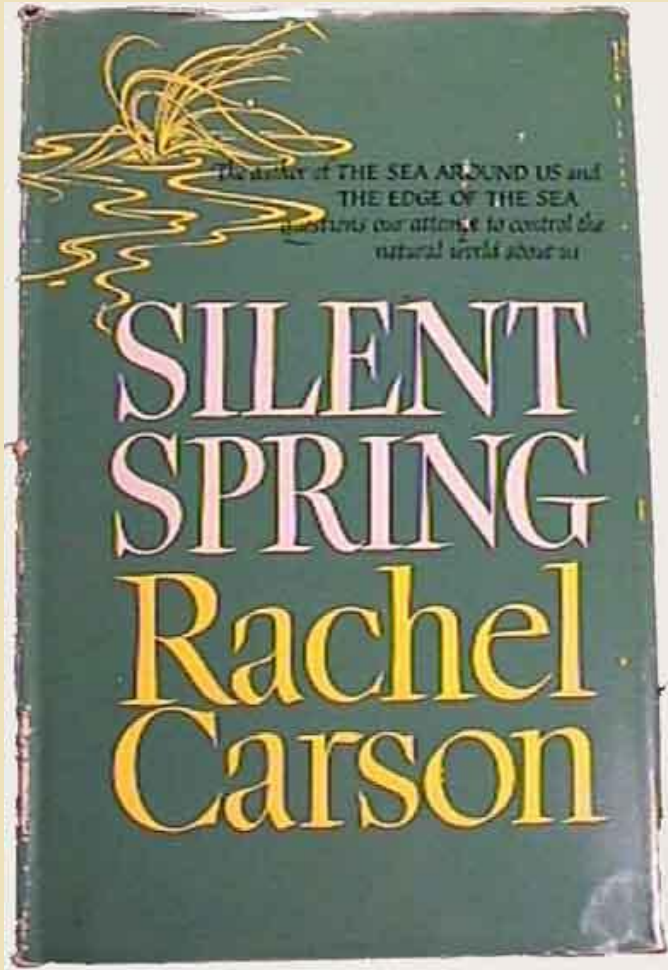
admits lack of knowledge about the contamination of ground water  
and its consequent effects.

**Luther Terry** (Surgeon General)

expresses concern about not knowing about the low-level, long-range  
effects of exposure.



***In retrospect, what were the roles of each of these voices in the media? Which were ultimately most reliable?***



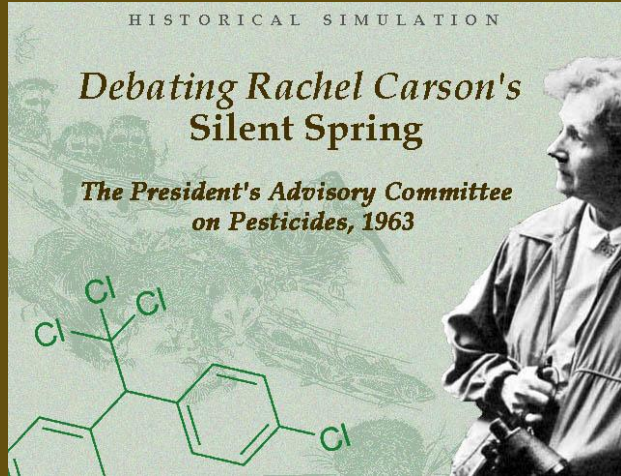
## Review:

*What have you learned about ...*

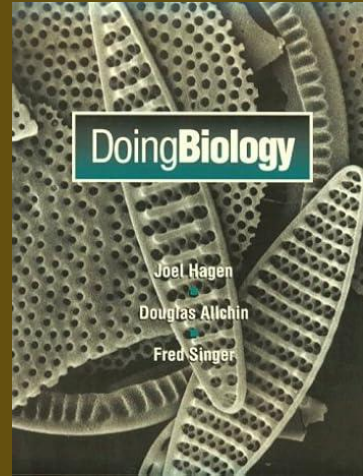
- credibility and relevant expertise?
- conflict of interest?
- scientific consensus?
- media gatekeepers (journalists)?
- disinformation & persuasive tactics?



## Sources & Additional Reading/Activities



<http://pesticides1963.net>



<http://doingbiology.net/carson.htm>



<http://shipseducation.net/misinfo/library.htm>

*Targeting*  
**MISINFORMATION**

The word 'MISINFORMATION' is written in a bold, black, sans-serif font. The letter 'I' is red, and the letter 'O' is black with a red dot in the center. The word 'Targeting' is written in a black, italicized, serif font above it.

<http://shipseducation.net/misinfo>