

They all have two things in common: Mass communication systems are readily available to them — and they are extremely articulate. The group includes free-lance professional writers, college professors, newspaper men and women, prominent figures in radio and TV, politicians and members of societies and clubs devoted to the outdoors as a hobby.

Who knows what their respective motives are? We can only speculate — which is what **they** do in all of their writing and speeches.

The free-lance writers secure income from their books or articles.

The professors receive public recognition — something they can never get by writing to professional journals.

The newspaper men find the subject of pesticides a way to fill their daily columns.

The politicians get their names in front of their constituents.

The radio and TV personalities are practicing good public relations by jumping on the bandwagon created by the others.

And the nature groups are reacting honestly to their sincere feelings. Their perspective is questionable, since it is not readily apparent as to where they stand on the sufferings of man, but their true love of the **other** plants and animals in our kingdom is real and evident.

The Critic's Formula

More important than who the critics are, or why they react as they do, is **how** they go about their work.

They all use "The Silent Spring" as their model. And they should — because it was a document containing a masterful technique that very few could improve upon.

The formula, and it has now become a formula, is a well-written introduction which uses numerous contrasting adjectives and nouns. There is a subtle transition made from wildlife, flowers and trees to "mysterious" ailments, "evil" spells, "strange" happenings and "nuclear" explosions.

A foreboding atmosphere is established. Then follows an interesting dissertation on some subject. Fascinating, accurate but irrelevant discussions of such items as bacteria, algae, fungi, a stretch of road, a conference of scientists, Greek mythology — and life cycles of organisms take place. In these discussions facts are used and the word "may" never appears.

With an aura of authenticity established, pesticides are injected into the picture. Then the word "may" suddenly sprouts like weeds. We are told that we "may" alter human germ plasm by use of chemicals. We are told that we "may" alter our future by choosing a chemical spray.

One writer implied that pregnant women "might" have deformed children if they sprayed with a certain fungicide.

Many writers have stated that pesticides "may" be causing cancer in man.

All this and much, much more in spite of statements to the contrary made by responsible men of science. The American Medical Association, a House Investigating Sub-Committee and prominent toxicologists have all stated that there are no known instances of pesticides injuring man when they have been properly used.

Pesticides are a poison. Accidents have happened. Again, accidents happen with innumerable chemicals, even with table salt and aspirin. But no one passes laws to get rid of salt or aspirin!

As the anti-pesticide article unfolds, all sorts of interesting words are placed before the reader. These include "insidious," "lethal," "biocide," "strange," "mutation," "notorious," "weird," "fearful."

One part of the formula is to seek out the exceptions. There are over 200,000,000 people in the U.S. alone and about 3-1/2 billion in the world. Some of these people have accidents. They burn to death; they fall off cliffs; they slip in the bathtub and break their necks. And a few of them die from the **accidental** ingestion of pesticides.

The writers search for these isolated cases and describe them. Their facile pens leave the reader with the impression that such accidents are commonplace.

Irrelevant statistics are part of the formula. For example, one writer tells us that ocean water contains 5-100,000 thousands of **one** part of DDT for every **million parts of water**. He then states that the average human has about seven parts per million of DDT in his body. Having thrown these figures at us, he exultantly states that man has over a million times the amount of DDT found in water!

These figures really only tell us two things: We have sophisticated equipment available which can measure **traces** of anything. And — there isn't very much DDT in a cup, a bucket or a whole ocean of ocean water!

These figures **do not** tell us what our scientists know! Seven parts per million of DDT is far, far below man's tolerance for DDT. Volunteers have been tested, scientifically, after eating a dietary intake of DDT 200 times the normal traces found in food. And, years later, they were found to be completely healthy. Workers in a DDT factory have been found to have 600 parts per million of DDT in their fatty tissue. And scientists, including M.D.'s, found these men to be perfectly healthy after 19 years of steady exposure to DDT. This is over 80 times the normal parts per million found in the average man!

But our writer-statistician doesn't tell us about these facts. He gets more impact out of his article by scaring us to death.

Fantasy Replaces Fact

Because the writer has few facts to use in making his case, he resorts to **fantasy**. This was a prominent part of the introduction to "The Silent Spring" wherein the **mythical** town was introduced.

It was recently used again by a professor turned writer when the major part of his article was based upon the "end of the ocean." To reach this dreadful situation, the writer dreamed up a fictitious chlorinated hydrocarbon discovered by the Russians. Naturally, this new product did us all in—Russians included!

Fantasy is always helped along by another element found in the writing formula: A small fact is grotesquely blown up. Capabilities never found in the laboratory by serious scientists are attributed to the chemical.

Speculation, a part of the formula, is then injected. The writer can then, if he chooses, and he usually does, come to the wildest of conclusions.

Example: All the phytoplankton of the sea are destroyed, all the zooplankton are destroyed, all the fish disappear.

The results are effective. The lay reader gets fearful and the true scientists get demands to show **negative proof**.

Negative proof is another part of the anti-pesticide writer's formula. It means that the scientists must show that a given chemical will never, under any circumstance,—taken in any quantity — and over an infinite period of time — do damage to us.

Negative proof can't be established for anything — including water and bread. After all, we've only been eating bread for a few thousand years. How do we know what it **might** do to us 100,000 years from now?