Pesticides: Can We Do Without Them?

Laurie A. Parendes

Department of Geosciences, Edinboro University of Pennsylvania

Scott H. Burris

Department of Agricultural Education, University of Missouri—Columbia



Part I—The Meeting

Sam Waters anxiously awaited the start of the county commission meeting. This would be his first official responsibility as a newly elected county commissioner. Little did he know when he won the November election that his first meeting would have such significant consequences for the residents of Johnsonville County. As people began to enter the conference room, these implications became all too real.

Sam recognized many of the faces in the room. John Shakely, the Commissioner of Agriculture, obviously was there to represent the diverse local farming community, which included both large and small operations. Commissioner Shakely and Sam had one thing in common: they had both recently been elected to their positions. Sam also recognized others from various political events, including Susan Fletcher, president of the local homeowner's association, and Josh Martin from the Natural Resource Conservation Service (NRCS). He quickly picked out Terry Halleran in the room as well. Terry was president of the local chapter of the Sierra Club and was very passionate for his cause. There were also unfamiliar faces in the room.

As everyone began to take their places, silence fell over the room. Commissioner Grant, chairman of the commission, began the proceedings: "Good morning and welcome to the county commission meeting. As you know, today we will decide if we will ban pesticide use in Johnsonville County."

Ouestions

- 1. Why is Sam anxious about this meeting?
- 2. What is a pest/pesticide?
- 3. What interests do the people at the meeting represent?



Part II—The Testimony

Even though the commission had met numerous times to discuss this issue, Sam remained undecided about how he would vote on the ban of pesticides. His colleagues, however, seemed to be more certain of their own positions in the matter. Commissioner Harris had repeatedly stated her concerns about the fate of the county-owned golf course. According to Harris, the maintenance and care of the facilities would be unmanageable without the assistance of pesticides. This enterprise would certainly become a financial drain for the county. Commissioner Smith, on the other hand, was firm on his position to ban pesticide use in the county. Smith was still mourning the loss of his beloved wife, Margaret, who had recently died of cancer.

With the other two commissioners firmly split on the issue, Sam realized that he held the deciding vote. He felt the weight of his responsibility and hoped that today's testimony would give him the confidence to make the right decision. Commissioner Grant continued, "Before we make our final ruling, we have several stakeholders who would like to speak...."

... As the meeting approached the two-hour mark, Sam was furiously trying to process the information that had been presented. Ag Commissioner Shakely clearly indicated that agricultural producers in the county would definitely be affected, but that argument was countered by Josh Martin's NRCS report of pesticide persistence and movement in the environment based on studies conducted by his colleagues in the agency. Susan Fletcher argued passionately that homeowners had the right to protect and preserve their property from pests. Mr. Baldwin followed Susan with data about how employment would be affected by the ban. Dr. Sherman Wiles spoke knowledgeably about the harmful levels of pesticides found in people. Dr. Kris Joudeki, a well-known ornithologist, revisited the warning sounded by Rachel Carson in her book Silent Spring.

As the last two speakers prepared their comments, Sam was no closer to a decision than he was at the beginning of the day. Dr. Mickey Delaney took the floor and said, "The county health department is concerned that a ban on pesticides could create a health care crisis that we are not prepared to handle." Finally, Terry Halleran made his way to the microphone. "Folks, we are caught in a vicious cycle. What works on pests yesterday, doesn't work today. What works today, won't work tomorrow. We must break this cycle!"

Questions

- 1. What benefits of pesticides were identified (or implied) at the meeting?
- 2. What harmful effects were identified (or implied)?



Part III—The Vote

As the meeting was called to a close, Sam felt the anxiety creep over his body. He knew it was time to cast his vote. Commissioner Grant announced, "The issue before us is whether to ban the use of pesticides in Johnsonville County. We will vote by roll call. Sam, on this issue, how do you vote?"

Ouestions

- 1. Considering economic, social, and political issues, how would a pesticide ban affect the county?
- 2. What are some of the ethical dilemmas that Sam faces as he makes his decision?
- 3. What should Sam do? Why?
- 4. As a society, can we do without pesticides?

Please see our usage guidelines, which outline our policy concerning permissible reproduction of this work.

Copyright © 2005 by the National Center for Case Study Teaching in Science.
Originally published 07/18/05 at http://www.sciencecases.org/pesticides/pesticides.asp