Letter to the Editor on “Effective Communication in Soil Science”

In my 14 yr as a Tri-Society member I have read countless articles in the SSSAJ, I have submitted a few manuscripts of my own, and I have had one published. In recent years, Tri-Society leaders alert us to declining membership and the need to regain touch with the public that we are supposed to serve (Bergfeld, 2003a, 2003b; Moser, 2003). Two themes emerge: declining membership and declining relevancy of our work to the public. To my mind, these two issues are strongly related, although I am sure there are more sides to the problem.

Is it possible that we fail to reach our public because of the archaic format of our journals, and scientific literature in general? Having some background in agricultural communications, I have long realized a peculiarity in our publication paradigm: the style is impenetrable to all but the most trained readers. The recent lecture that Dr. Margaret Davidson delivered to the Tri-Societies (Anonymous, 2003) reaffirmed to my mind the problem of poor communication.

The typical article in the SSSAJ starts with an often uninspiring title that supposedly delivers the content in a short sentence. Yet, the reader mostly benefits from the conclusions. The conclusions are the reason of an article’s being, therefore to my mind they should figure prominently in the title. Instead of saying, “The effect of liming on wheat yield,” a stronger title is, “Liming boosts wheat yield in acid soils.”

After the title follows a dense abstract, in tiny, hard to read print that demands the uninterrupted concentration of the reader for several minutes. It is true that there are techniques to expedite the consumption of a scientific article. It is equally true that this style of writing was invented in an era when less information was consumed. Nowadays, many more print and electronic sources compete for our attention.

If you want to be popular, why not write in a popular style? Let us follow the paradigm of news reporting. A newspaper or magazine article may start with a short, catchy title, in large typeface. Thereafter follows a second title, in smaller typeface, that reiterates the concept of the main title. Then, the first paragraph reiterates the concept in yet more words, in small Serif typeface and narrow columns that are easy to read. So, instead of having to swallow a dense abstract up front, the reader is gradually introduced to the concept in a hierarchical manner from the general to the specific.

One advantage to news writing is that readers can choose to consume as much information as they want. By the time they read the first paragraph, they know enough to decide whether to continue reading. The second advantage is that, by becoming progressively more demanding, the writing does not overwhelm the reader. The third advantage of writing in layers is that the essence of the article is not compromised. The detail of the experimental procedure is preserved for the meticulous scholar, out of plain sight for the casual reader.

If we want to make the public interested in our work, we must attract the public’s attention. The emphasis so far has been in the production of science. I think that the emphasis must shift to the consumption of science. Scientists have much to learn from news reporting, even from tabloid journalism.

To me, tabloid headlines are marvels of word economy and effectiveness, even if what follows is garbage. The fact remains that a headline such as “They poison our drinking water” is eye-catching, no matter what the copy reads. If, as a soil scientist, I could attract the attention of the average layperson, I would be ahead in the game of communication.

Another reason for the impermeability of scientific reporting is the statistical interpretation of results. Statistical analysis understandably is complicated. The interpretation does not have to be. The substance is often lost in a maze of numbers and jargon. The retention of the null hypothesis is interpreted as a lack of evidence to reject it. Instead of saying, “the soil is just as well without my treatment,” scientists essentially say, “I did not reject the fact that the soil is not better with my treatment.” These double and triple negatives could make a person suspicious as to whether the true intent of science is to provide answers or to obfuscate reality.

There is an unwritten code of chivalry that discourages overt attacks on fellow scientists. We think that it is inappropriate to openly express contempt for other people’s research in our papers. Yet, it is all right to stab fellow scientists in the back as anonymous reviewers. Time and again, the anonymous reviewers of my manuscripts spell all the venom that they have collected over the years caused by other reviewers spilling their venom on them. Please contact me if you want samples of unprofessional reviews. To me, the main purpose of the reviewer is to help the authors look their best on paper; I have received attacks that had little to do with my research but had everything to do with the insecurities of the reviewer. I think that the core of true chivalry is accepting responsibility for your actions. Attacking anybody under the cover of anonymity is the most irresponsible and ungentlemanly thing.

This is not a healthy environment in which innovation can thrive. At the very least, I think that we have the right to know who our attacker is.

After 14 yr of consuming the SSSAJ, I cannot say that it has become any easier to read or more accessible. Also, the worldwide web did not exist 14 yr ago. Nowadays, it seriously competes for my reading time. While our Society leaders ponder the reasons for declining membership and our lack of impact in society, this is a perfect time to become proactive. Proactive means, instead of mourning over the loss of our public, ask what we can do to win our public back. To me, improving our written communication is the first step.

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REFERENCES