Communication of Knowledge and Needs Between Forest Researchers and Practicing Foresters

by Alex L. Shigo

ABSTRACT — Forest researchers have produced a wealth of knowledge about trees, but not enough of it reaches the practicing foresters who need it and can use it. Some possible reasons for this are discussed, and the need for improving two-way communication between forest researchers and practicing foresters is emphasized.

False Premises

We forest researchers start with the premise that practicing foresters want new research information about trees. This premise may not be entirely true. To accept and use new information sometimes requires that a current procedure or practice must be changed.

Another false premise is that all research can have direct and immediate practical applications. This is not necessarily true. A sound research program may include much information that is not currently applicable.

Change and Risks

People resist change. Change means that some old practices and procedures must be abandoned or altered. There is a sort of security in performing the same task the same way for a long period. Change signals a risk. What if the new idea, or new tool, or new method does not work? What if change will cause some new problems?

"What if," "what if," and "what if" can stop many people before they give any new thing a reasonable chance. It is naive to think that, just because a person asks for new information and new tools, he will accept them and use them.

The Receptive State

To accept new information, a person must be in a receptive state. There are times when a person is not ready to receive anything new. When all is going well, it may be difficult to get a person to change the way he is operating.

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But, when a person is in trouble, he may still not accept new information simply because the information does not help to satisfy a current need. The person in trouble still must be in a receptive state. For example, consider the person who has trees dying from drought. New information about preventing flooding will not be welcomed. Timing is extremely important, especially the timing of new information to help satisfy a current and pressing need.

Interactions, Problems, Needs, and Priorities

The forest researcher must be aware of current forestry problems and needs of the forester. He must know which problems and needs have the highest priorities. The forester must know the researchers who can help him with his problems.

But unless people get together, they will have communication problems. Too often researchers and foresters go on their separate ways until some emergency brings them together. Even at meetings, most researchers tend to talk mainly with other researchers, and foresters with other foresters.

Transmitting information is not a oneway process. While the researcher is sending out new information, he should be receiving new information from the forester.

Classic Barriers

There are some long-standing barriers between forest researchers and practicing foresters. Many foresters tend to think that researchers live in high ivory towers and cannot be approached except by other researchers. Some researchers tend to think that foresters are too busy with day-to-day operations or cannot understand the intricacies of research

Some researchers, being scientists and scholars, erect their own barriers between them and the people they want to communicate with. By writing and talking in laboratory lingo and technical jargon, they surround themselves with a barbed-wire barrier of words that keeps their ideas from getting out to the people who might use their knowledge.

But Is It Research?

Some researchers will not accept transmission of information as a research responsibility. They believe it is not research! Their position is fortified by some research administrators. They believe that this activity should be done only by extension professionals and that the researcher should then get on to "more important things!"

Who Should Do It?

A complex problem begins to emerge. Many people tend to be concerned over slight overlaps in responsibility. Insecurities begin to show. But there is a solution.

The researcher who does the experiment is in the best position to develop and transmit his message. Often the researcher must combine his new results with results from his older work and from the work of other researchers.

After the message is developed, the extension specialist can help to tailor it to fit the needs of others. The extension specialist then can begin to disseminate the message. There will be all degrees of overlap, but this can be an advantage, not a disadvantage.

Problems With Incomplete Research

This procedure is fine as long as the researcher has something to tell. But this is not always the case. Some researchers accumulate mountains of data over many years of hard work, yet neglect completing portions of the work to the point where a message can be developed. The ability to complete portions of research is the mark of a mature researcher.

If the information is to be transmitted, it must be in a completed and usable form: Nobody will buy a tool that is incomplete. It is the same with information. The user of information cannot be expected to accept incomplete information and to fill in the missing parts. The user usually does not have the time or the training to do this. The researcher must give the user a complete package

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The Package

If you want somebody to accept and use something, your chances are better if you put it in a package. The package must be designed to get the attention of the target audience. The message must be presented in a form that can be received easily and quickly by the user at the time he needs it most. This is what packaging is all about The key words are audience, attention. timing. and message

There are many different ways to get the attention of people. Unless you get a person's attention, your message is wasted!

There are many different ways to present a message. The facts must be accurate, but the way the message is tailored to fit users can be highly variable.

But even if the perfect package were developed, it does not guarantee that users will rush to accept it. The old proverb about building a better mouse-trap and having the world beat a path to your door is extreme naivety, based on the half-truth that the person indeed wants a better mousetrap.

Getting useful new knowledge put to use is a common concern for both the forest researcher and the practicing forester. Both of us have to work on it.