



RALPH SMITH
Program Leader,
Communications,
Agricultural
Extension
Service

ECOLOGY NOW

. . . and other communications from the public

COMMUNICATION, because it deals in human thought, memory, and expression, is not an exact science. It is exact enough, however, to crack the myth of scientific illiteracy in the American public.

The public—at least a significant part of it—is interested in science. It understands science. It has confidence in science. Still the public seems to be trying to communicate something to scientists. The message is that non-scientists are no longer content to let only scientists decide what science will investigate.

These thoughts come largely from a National Seminar on Agricultural Science Communication, held a few months ago in Washington, D.C. University administrators and editors considered how agriculture can be explained meaningfully to the general public, most of it non-agricultural.

A survey by the Association of Science Writers found agricultural science fairly high in public interest. Space science came first and medical second, but agriculture ranked third—ahead of atomic energy, invention, and aviation.

Thanks to some notable contributions to the news, including flights to the moon and transplanting of human hearts, the communications media reflect a strong awareness of science. A communication researcher at the University of Minnesota, P. J. Tichenor, says the public is not only aware of science, but even understands much of its complex terminology. Once explained, such concepts as lunar module, orbital capsule, organ rejection, cardiac arrest, poly-unsaturated, and caloric content are no obstacles to understanding and recall. Neither are numbers. Our society is quantitatively minded, says Dr. Tichenor.

But since *Silent Spring*, he says, the public is also aware that scientists are not

all in agreement. He suggests that research institutions may never again be able to communicate science convincingly to the public without letting the critics in on the report. A scientifically-aware public may wish to hear from both sides.

Will critical reporting then affect public support of science and technology? Tichenor suggests that support of science never has been based on science worship. Even our once-lavish support of the space program, he feels, was more in a spirit of national competition. We backed the home team in a moon race with the USSR.

Perhaps the real message from the public to science is that we are in another race today—a critical one. The messages of the bumper strips and window stickers, simplistic though they may be, say that we are racing with time to solve problems of pollution (of soil, water, and air), land use, and renewal of natural resources—all problems in which technology affects people and the environment.

Dr. Tichenor's studies convince him that Americans still have, "boundless faith in the technologic ethic." In a survey he invited public reaction to this statement "Technology got us into the environmental crisis and technology will get us out." Eighty-three percent of the respondents agreed.

That is a massive vote of confidence. If it is a valid communication from the public, it seems to be defining the area where public endorsement of scientific effort is strong. It is almost exclusively the area of agricultural research.

If support of science is in proportion to our standing in the competition, what about the race for human survival? The contest seems sporting enough for public approval.