

In My Opinion

Interpreting Biology

This page has carried statements recently to the effect that one of the big educational fields to conquer in the near future is that of adult education. This is an especially ripe field because the science of biology has made such rapid strides in research areas which have so much relevance for the general population and its future on earth. This page has also carried statements that science is in politics whether scientists want it or not. Science costs too much money for the public to long ignore the bothersome question as to science's utility.

The September, 1966 issue of *Harper's*, several September, 1966 issues of *Life*, and many issues of *Science* this year have highlighted the immediacy and the importance of the problem. Congressmen and the Executive Branch of the Government are increasingly concerned about "big science." Population growth here and throughout the world has brought into sharp focus the biological problems raised by human crowding—territoriality, food supply, waste control, pollution, and just the plain tensions raised in living organisms by their crowding. Further, people who make big decisions which have so close a connection with science want explanations, and there are few to do the job. But beyond these key men, science is confronted with the importance and necessity of telling the story to our adult, voting population.

Who should do the job of interpreting biology to the general populace who are no longer in the formal academic environment? The answer is simple. The professional researcher must develop a facility for explaining in simple terms to highly intelligent decision-makers what is going on in his field of research, and most importantly, why it has significance for the public. This implies that the researcher must understand his field so well, and not just a corner of it, that reducing its explanation to simple terms is no burden. After all, it is almost a cliché that the more profound one is, the simpler are the explanations one makes. Further, it im-

plies that the professional biologists must consider carefully what significance, potential or apparent, his research has.

The second, but more important interpreter is the professional biology teacher. His life is devoted to interpretation, exposition, and logical development of a body of knowledge.

Where and how can these interpretations be effective? The researcher should carry his message to all groups which his time permits and to an audience commensurate to the researcher's importance in his field. These audiences include those reached by the press—he must consent to be interviewed. It includes magazines—he must write lucidly and frequently. It includes legislative, business, and executive groups—he must be articulate and aware of what public policy should be. It includes youth—he must speak to classes, clubs, meetings.

Only a day ago, this writer and Past President McClung were privileged to interview on tape Dr. Oscar Riddle, founder of NABT and a distinguished endocrinologist. In his 89th year, Dr. Riddle answered our question as to how he started in science by recalling a scientist visiting his small community from nearby Indiana University and lecturing to a group of about 25 in a local church on evolution. He was 13 years of age, and he made a firm decision then to pursue the study of biology.

All of us must write and speak, as lucidly as we can, for the adult audience which craves our up-to-date understanding of modern biology. What other mechanisms do we have? We can serve on local, regional, and national committees devoted to pressing social problems. We can work with adult educational institutions, e.g., night schools, museums, recreation areas, etc. We can encourage the establishment of advisory committees to public officials. We can take a stand on public issues. We can run studies on local conditions which have biological significance. We can fight our society's nihilism and know-nothingism by being positive in our beliefs about biological knowledge.

In short, we can and must take our citizen's responsibilities more seriously and aggressively when public issues demand a biological understanding.

Editor