

attached to this testimony. Actually, it was prepared at the suggestion of Freeman Quimby of the Library of Congress staff, and as he has now seen it for the first time this morning and as almost no one else involved has yet seen it, I ask the indulgence of the Subcommittee in placing this preliminary draft on record.

Finally, let me comment briefly on some other ideas that are circulating that are intended to increase the effectiveness of ecology in public affairs. I have tried to make it clear that I believe that ecology will acquire an appropriate voice in public affairs when it deserves one as a consequence of being better science. Much of the talk we hear—and I have probably talked as much as anyone on such matters, is simply not effective because, as L. B. Slobodkin says, it “tends to substitute purpose for action”. Slobodkin warns us about “the satisfying sense of being unable to take specific action because of a malicious, or at least uninformed, opponent or class of opponents”.

I believe most ecologists would like very much to see such an advisory group as the proposed Council of Ecological Advisors or Council on Environmental Quality attached to the Executive Office of the President, providing genuinely informed advice on environmental programs in parallel to that given by the Council of Economic Advisors. Several bills providing such councils are now being considered by this Congress and this Subcommittee, and I think I should say very little about any one of them because I tend to favor them all rather indiscriminately but do not feel professionally qualified to argue the finer points of managerial science with advocates of one or another council.

In other words, ecologists, who are citizens first, are natural scientists second, and political scientists a very poor third, so that their role in advice-giving councils needs to be carefully delimited to the areas of their professional competence. By no means do I say that ecologists should not worry about such matters, for they must and will, but I suggest they will meet their political objectives faster if they get on with their own job of doing better ecology.

THE ECOLOGICAL SOCIETY OF AMERICA.

*To a Selected Group of U.S. Ecologists:*

We are sorry to inflict another questionnaire on you, but we think this one is important to you as an ecologist, and it won't take much of your time. Please read these questions with care, discuss your answers with others on your campus if you feel you need to, but return the questionnaire promptly, i.e. within a week. We will collect most answers by telephone, as we want 100 percent response, but if you take a little time to consider your answers first the telephone inquiry can be efficient as well as thorough.

The immediate purpose is to prepare ourselves for a congressional inquiry into the state of ecology as a profession. Representative Daddario's Subcommittee on Science, Research and Development is conducting a new series of hearings on environmental problems, and E. S. Deevey and I are invited to testify for ecologists. In a letter written during the last session, Mr. Daddario doubted that ecology is yet able “to become an umbrella science for greatly expanded research effort”, but praised the Ecological Society's activities that “involve ecology in public affairs as well as the education of ecologists and the infusion of ecology in general education at all levels.”

We find our own information about research training, is very deficient. The general surveys available (including the one now being assembled by the NAS/NRC Committee on the Life Sciences) do not adequately identify *ecology* as a separate subdivision of biology, owing to admixture with systematic, evolutionary, and physiological biology. Moreover, an outstanding property of ecological education is its interconvertibility; under certain circumstances—especially assuming the enlarged responsibilities Mr. Daddario is concerned about—meteorologists, geochemists, oceanographers, and behavioral biologists are all, or can easily become, ecologists, and economists, anthropologists, and other kinds of social scientists should also be considered. Our questions are designed to probe into this interconvertibility. We hope that a quick survey will produce more meaningful estimates of the numbers of ecologists than a more highly organized and costly survey that fails to ask the right questions of the right people.

You have been selected, probably somewhat arbitrarily, to speak for ecology on your campus. Some of you are departmental chairmen, but our idea is to ask ecologists, not administrators. As a professional, you yourself exemplify the multidisciplinary aspect of the subject that we want to emphasize, and we cannot be sure that that is true of chairmen, deans, and registrars.