THE LOCAL LEVEL

The International Biological Program was born in 1964 of mounting concern with the major problems confronting mankind—increasing human populations, food shortages and starvation, the threat of widespread famines, and the continuing destruction of our environment.

On the national scene, in 1965 the Environmental Pollution Panel of the President's Science Advisory Committee presented us with 22 pages of recommendations for restoring the quality of our environment. In 1966 the Committee on Pollution of the National Academy of Sciences, in a report to the Federal Council for Science and Technology, also made substantial recommendations for solutions to the problems of pollution processes in ecosystems. A Strategy for a Livable Environment was sent to the Secretary of Health, Education, and Welfare by the Task Force on Environmental Health and Related Problems in 1967, recommending ten immediate action goals that, if achieved, would allow every American to live in an attractive, comfortable, convenient, and healthy environment.

Concurrently, there has been introduced in the Congress a plethora of legislation dealing with environmental problems and culminating in the President's Message on the Environment on 10 February, 1970. He outlined a comprehensive 37-point program embracing 23 major proposals in five major categories: water pollution control, air pollution control, solid waste management, parklands and public recreation, and organizing for action.

Now we have a Council on Environmental Quality, a proposed Environmental Protection Agency, and a proposed National Institute of Ecology. All of this is encouraging.

It is also encouraging that, on a more local level, the Regional Planning Council for Baltimore and the five surrounding counties, an area of 2200 square miles with two million people, this year established 12 advisory panels, one of which is concerned with the environment. It is not so encouraging that on the Council itself, and on its 12 advisory panels, there is only one biologist.

The importance of this virtual lack of ecological perspective is apparent from the fact that the approximately 50 local projects receiving federal funding, including open space, planning or construction of hospitals, airports, libraries, water supply and distribution facilities, sewage facilities, law enforcement facilities, and water development and land conservation, must by federal law be reviewed by the Regional Planning Council. Seventy-four federal grant requests, totaling $47,824,430 were reviewed by the Council in 1969. Suffice it to say that there are similar responsibilities on planning councils or their equivalents in every community, township, or county in this country, and that there exists in each area enormous pressure for development of diverse character.

To understand the structure and function of an ecosystem requires, at the very least, long-term investment of time and energy of persons of varied disciplines. The ultimate goal is a model so exquisite in construction and so exactly simulating the biological functions it represents that it could reflect the slightest change in the system. We are far from achieving such a sophisticated level of knowledge and implicit predictability, but this cannot be used as an argument against striving for such a legitimate goal. Indeed, our very survival may ultimately depend on the achievement of such a goal.

At the same time, while the order of complexity of local environmental problems may seem to be of a lesser magnitude, solution of these problems is also a legitimate goal that must be achieved for the same purpose, and perhaps even more urgently. After all, as we eliminate, almost systematically, components from the model, we may reduce prediction of subsequent events to zero.

As a consequence, I would like to propose that there be established a companion program for the IBP, and that we call it the International Community Action Biological Program. Such a program, designed to have no end, would provide the information transfer system from IBP to ICABP that can only be provided by biologists working daily at the local level.

FRANCIS S. L. WILLIAMSON