

II. ACTIVITIES OF FEDERAL AGENCIES

This report includes information about the types and levels of Federal activities contributing to understanding natural plant and animal communities. Most government agencies are concerned in some sense with man-in-environment, and there are few if any aspects of society and culture that cannot be described as ecological by someone. A rigorous attempt was made to confine the inquiry to wildlands, to biological and closely related physical science, to native or indigenous species, and to natural rather than artificial systems. Environmental programs largely or solely concerned with the physical or the social environment were excluded at the outset. So were activities related only to intensively managed or man-created environments, such as cultivated fields and urban areas. But much work carried on in such areas is directed to fundamental ecological processes, and the results can be and are being extrapolated to natural communities.

It is likely that agencies, in responding to the inquiries, interpreted the "ecological" aspects of their missions rather generously. Some subjective judgments also are inherent in interpreting and categorizing the responses, implying that a general, rather than literal, assessment of the data is appropriate. At any rate, by almost anyone's definition, ten² agencies of the Federal Government support work that contributes to the understanding of natural plant and animal communities and their interactions with man. And, under their interpretation of what that understanding requires, the total expenditures in this area were about \$162,422,000 during FY 1965 and \$175,355,000 during 1966.

The major share of these expenditures was on research concentrated on individual species of plants or animals, or populations of these species, and on surveys which provide data about how much of what is where. The species studied were largely those that are pests of man or that he uses directly for food, or fiber, or recreation. Much of the knowledge gained from such studies is useful in understanding natural plant and animal communities, and some of it would in fact have to be gathered specifically for this purpose, were it not otherwise available. A relatively small amount of effort was devoted to plant and animal communities and even less to studies of whole *ecosystems*. Studies of ecosystem functioning, however, are central to understanding the interrelationships of man and natural plant and animal communities. Such studies have received very little support.

Federal support for higher education related to the study of natural communities comprised a relatively small proportion of the expenditures reported.

The distribution of expenditures among topics and agencies is summarized in Table 1. About 74 percent of the total fund support was used for research and related activities. Surveys of soils, forests, range land, hydrologic conditions and animal populations accounted for an additional 23 percent. The remaining 3 percent was used for education and training. The distribution of expenditures was as follows:

Fiscal year	Intramural	Extramural grants and contracts	Higher education
1965.....	\$106,508,000	\$51,985,000	\$3,929,000
1966.....	115,649,000	55,269,000	4,437,000

² The Bureau of Public Roads which was under the Department of Commerce when agency activities were surveyed is now a part of the Department of Transportation.