

Studies of micrometeorology and remote sensing of biological and physical conditions and phenomena; the development and improvement of bioinstrumentation; and Antarctic experimentation are examples of other support activities related to advancing our understanding of natural plant and animal communities. About \$19,800,000 was expended in this area in FY 1965.

Soil and Water Conservation.—Atomic Energy Commission, Department of Agriculture, Department of the Interior.

The soil and water components of natural communities are vital to plants and animals that live there. Information about ways to maintain and improve their quality and productivity are sought in field and laboratory research. Studies of soil composition, structure and texture; and water source, composition, distribution, and quantity are examples of research to better define and manage soil, water, plant, animal, and marine life relationships. These and other facets of soil and water research are a part of an overall effort to more efficiently use and more completely conserve these resources. About \$20,200,000 was expended for such research in FY 1965.

Non-domesticated Plants and Animals.—Atomic Energy Commission; Department of Agriculture; Department of Defense; Department of Health, Education, and Welfare; Department of the Interior; National Science Foundation; Smithsonian Institution.

This category includes research most directly concerned with the interrelationships between plants and non-domestic animals in natural areas. Examples are studies of the interrelationships between plant communities and wildlife, animal ecology, plant ecology, and fish habitats, the effects of hurricanes on natural areas, and the causes of both short and long-term vegetational changes. Investigations of the ecological effects of water use projects on fish and wildlife and the effects of human use and beautification of wildlands are conducted to evaluate the influence of man's activities on natural communities. About \$18,600,000 was expended in this area in FY 1965.

Surveys (Atomic Energy Commission; Department of Agriculture; Department of Defense; Department of Health, Education, and Welfare; Department of Interior; National Aeronautics and Space Administration; National Science Foundation; Smithsonian Institution).

This work involves identifying, measuring, classifying, and documenting existing bioenvironmental conditions; where appropriate, relating findings to preceding conditions and contributing factors; and identifying and measuring changes and trends, as well as the scope of variation and diversity.

Continuing, periodic, or one-time surveys are made. They range from national and regional efforts to activities in selected locales. Among the subjects studied were:

- Biological productivity in waterways.
- Exotic chemicals.
- Forests.
- Freshwater fish.
- Land.
- Marine benthonic organisms.
- Marine fish.
- Plant and animal pests—diseases, insects and parasites.
- Poisonous or unwanted plants.
- Poisonous marine animals.
- Range.
- Seals.
- Soils.
- Soil, water and air contaminants.
- Whales.
- Wildlife habitat.

About \$39,000,000 was expended for such work in FY 1965.

Education.—Atomic Energy Commission; Department of the Interior; Department of Health, Education, and Welfare; National Science Foundation.

Grants for higher education, including pre- and post-doctoral fellowships and traineeships; support for facilities for scientific training; the preparation and distribution of bibliographies; and scientific data centers are among activities included under this hearing. About \$3,900,000 was expended in this area in FY 1965.