



Undegraded desert vegetation in the erg of Djenein, southern Tunisia (elevation, 200 to 400 meters; rainfall, 50 to 70 millimeters). Barkhans on a lime crust support the growth of *Calligonum comosum*, *Aristida pungens*, and *Helianthemum confertum* subspecies *brachypodum*. [From *Arid Lands in Transition* (AAAS, Washington, D.C., 1970)]

Arid Lands Activities

Desertification—the spread or intensification of land degradation in arid and semi-arid regions due to climatic changes or human activities—is occurring at an alarming rate around the world.

In an effort to foster international scientific cooperation and to assist in development of a worldwide effort to combat desertification, AAAS is undertaking a series of activities which will revolve around the upcoming United Nations Conference on Desertification.

This project will be located in the AAAS Office of International Science and will be under the direction of a special Advisory Committee. Chaired by Harold E. Dregne of the International Center for Arid and Semi-Arid Land Studies, Texas Tech University, Lubbock, Texas, the Committee will be inter-

disciplinary in nature and will include the chairmen of the Committee on Arid Lands and the Committee on Desert and Arid-Zones Research. Priscilla Reining, an anthropologist with extensive experience in Africa, will be project director within the AAAS Office of International Science.

Activities scheduled to date are an international strategy meeting of arid land scientists in Italy in June; a 3-day symposium of international scientists immediately preceding the August–September 1977 U.N. Conference in Nairobi, Kenya; and the identification and development of global research projects to assist in the implementation of the U.N. World Plan of Action.

In addition, a *Directory of Arid Land Scientists in North America* and a worldwide *Directory of Arid Land Institutions* are being prepared for the U.N. Conference at the Office of Arid Lands Studies, University of Arizona.

Educational and public information activities also are expected to be undertaken within the project.

In addition to Dregne, members of the Committee are Alonzo C. Atencio, Department of Biochemistry, University of New Mexico Medical School; Marion Baumgardner, Laboratory for Applications of Remote Sensing, Purdue University; John W. Bennett, Department of Anthropology, Washington University; Bahe Billy, Farmington, New Mexico; Thadis W. Box, College of Natural Resources, Utah State University; Carl N. Hodges, Environmental Research Laboratory, University of Arizona; Helen Ingram, Institute of Government Research, University of Arizona; Robert W. Kates, Programme in International

Development and Social Science, Clark University; Jack D. Johnson, Office of Arid Lands Studies, University of Arizona; William E. Martin, Department of Agricultural Economics, University of Arizona; J. D. McQuigg, Columbia, Missouri; D. F. Peterson, vice president for research, Utah State University; M. L. Riedesel, Department of Biology, University of New Mexico; and Calvin H. Raullerson, International Center for Arid and Semi-Arid Land Studies, Texas Tech University.

Persecution, Limits to Scientific Freedom to Be Studied by Committee

The boundaries of scientific freedom, alleged persecution of scientists at home and abroad, professional and social responsibilities of the scientist, and freedom of science teaching have been identified as subject areas for new subcommittees created by the Committee on Scientific Freedom and Responsibility.

The five working groups, named during the Committee's first meeting in Washington, D.C., 8 and 9 October, are the Subcommittee on Infringements of Scientific Freedom in Foreign Countries; Subcommittee on Infringements of Scientific Freedom in the United States—Individual Appeals; Subcommittee on the Boundaries of Scientific Freedom—Ethical and Legal Limits; Subcommittee on Professional and Social Responsibilities of Scientists; and Subcommittee on Freedom of Science Teaching.

Several projects to be developed by the subcommittees were discussed during the full Committee meeting. In particular, activities will include establishment

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Science Books & Films needs additional reviewers for *elementary level films* on psychology, mathematics, zoology, nutrition, and medicine. Reviewers are also needed for *high school and college level films* on child development, human sexuality, special education, sociology, and space sciences. Films to be reviewed are 16mm, and reviewers must have access to appropriate equipment. Interested scientists and teachers should respond to the Editor, *Science Books & Films*, AAAS, Sixth Floor, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036.

Note to Members

In the course of the current AAAS membership recruitment campaign, an occasional membership invitation letter reaches someone who is already a member of the Association. This occurs because very high costs involved make it impossible to purge all the lists used to eliminate mailings to our current members. The Membership Recruitment Office asks all members to bear with this situation and apologizes for any inconvenience caused by it.

of a clearinghouse and referral function by the first subcommittee, which will serve as a focus for allegations of repression or persecution of scientists in foreign countries. The group addressing this issue will develop a referral system by which an individual allegation may be referred to the appropriate affiliate of AAAS for attention and by which reports may simultaneously be drafted for examination by the full Committee in an effort to identify significant patterns or issues arising from individual allegations.

A second project of the Committee will be a referral system for individual appeals on infringements of scientific freedom in the United States. The subcommittee charged with this activity will develop a referral system similar to that described above to allow for simultaneous study of issues of concern arising

from appeals. The Committee's charter allows for direct review by the subcommittee or full Committee of selected appeals in exceptional circumstances.

During its meeting, the Committee concurred that science is not an unbounded activity and that the limits to scientific freedom are necessarily negotiated between the scientists and the society in which they work. Committee members voiced their concerns that this process of negotiating the parameters of scientific freedom poses a critical issue for the scientific community at this time, due to several recent examples in which either representatives of society or the scientific community have made seemingly arbitrary decisions as to where the boundaries should be. In order to examine this negotiation process more fully, the subcommittee will collect and, where necessary, prepare case studies which highlight specific examples of the limits of scientific freedom. The subcommittee also will question whether or not the professional societies have a role to play in determining these boundaries.

An examination of the professional and social responsibilities of the scientist will be the fourth project of the Committee, with a particular review of the process known as "whistle-blowing"—when, for example, an employee decides that a concern for public welfare supersedes allegiance to his or her employers and acts on that resolve by informing outsiders of illegal or irregular activities within the organization. The subcommittee involved in this review will work with the professional societies in developing guidelines for determining when a "whistle-blower" needs outside support and the ways in which such support could be provided.

Because of recent attacks on science education, the Committee also will examine the basic rights associated with science education as a distinctive case in scientific freedom. The subcommittee on science teaching will examine various aspects of this subject, such as the preparation of textbooks and other teaching materials related to science curricula. The subcommittee will examine the political pressures resulting from public groups who are hostile to the teaching of certain scientific principles and will consider how best to meet these political pressures on legislative and funding agencies.

The five subcommittees will meet informally during the next several months. A second meeting of the full Committee will be held during the AAAS annual meeting in Denver and will be open to the public. The Committee will sponsor

an annual meeting symposium entitled "Case Studies in Scientific Freedom and Responsibility" and urges all persons interested in the above projects to attend this symposium and to offer their views and comments on the Committee's directions.

The 13-member Committee on Scientific Freedom and Responsibility is chaired by H. Bentley Glass, editor of the *Quarterly Review of Biology* and a former president of AAAS. In addition to the members named previously (see "AAAS News," *Science*, 3 September 1976, page 877), two other persons have been appointed to 2-year terms. They are Joel Primack, assistant professor of physics, University of California, Santa Cruz, and Jessica Tuchman, biologist and staff member, office of Rep. Morris K. Udall.

Regional Seminars Scheduled

"High Level Radioactive Waste Management," cosponsored by AAAS and the Michigan Sierra Club, will be held on Wednesday, 8 December, at the Lansing (Michigan) Civic Center. Four panel presentations, each followed by questions from the attending public, will focus on the following topics: the nuclear fuel cycle—where and how wastes are generated; public concerns over current proposals for disposal of high level radioactive wastes; the Michigan energy picture, including opposing views on whether nuclear power is necessary for the future energy needs of the state; and a review of the decision-making process in the waste management area of nuclear technology. For information, call the Michigan Sierra Club at (517) 487-8382 or the Michigan Students Environmental Foundation at (517) 484-7421.

"Living with Seismic Risk: Strategies for Urban Conservation" will be held on Friday, 10 December, at Casa del Prado, Balboa Park, San Diego, California. The issues in question involve building codes in earthquake hazard areas and the problem of older buildings that are sometimes of historical importance, that often house large segments of low-income populations, and that do not meet stringent seismic safety codes. Sponsoring the seminar along with AAAS are the San Diego Chapter of the American Institute of Architects, several San Diego city government agencies, the Save Our Heritage Organisation, and the San Diego Gaslamp Quarter Task Force. For registration information, call Marti Bundy, (714) 732-0109.

\$100,000 in Bequests

A check for \$98,337.03 representing the final distribution from the probate estate of the late Charles M. Goethe was received by AAAS in August. The check brought the total amount received from Mr. Goethe's estate to \$472,380.35. Mr. Goethe had joined AAAS in 1914, becoming a 50-year member in 1964. He had made quarterly contributions to the Association for support of research by selected academies of science from 1944 until his death on 10 July 1966.

An additional check for \$1000 came to AAAS in August as a bequest of the late Setrak K. Boyajian of Hudson, Massachusetts, who had joined the Association during its centennial year, 1948.