from this flight is that we need to know enormously more than we do at present about hurricanes. . . . It seems to me that next year's program should be to study hurricanes away from land, maybe out considerably beyond Bermuda, out in the middle of the Atlantic, make an extensive study of them, flying from the right to the left, forward and backward, and learning what happens, and see if we cannot by seeding them in some way modify them or shift their positions. I think the chances are excellent that with increased knowledge something can be done. The stakes are large, and with increased knowledge I think we should be able to abolish the evil effects of these hurricanes" (*1*).

Langmuir's scientific vendetta with the hurricane did not end here. Like Cato and his "Carthāgō delenda est," he invariably concluded his talks about weather modification with an impassioned plea for a comprehensive hurricane seeding program. He would be pleased by the encouraging results indicated in Gentry's paper.

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Reference

1. I. Langmuir, *Proc. Amer. Phil. Soc.* **92**, 167 (1948).

Biological Field Work

As many nations have begun to show concern for their biotas, they have been stimulated to establish stringent restrictions on collecting. Much of the stimulus has come from a few collectors, most of whom are taking specimens commercially or for personal collections. In order to counteract the impression that most field scientists are irresponsible, the following Guidelines for Biological Field Studies have been prepared. Up to the present, the guidelines have been signed by the responsible officers of 29 institutions. We hope that this voluntary statement will reassure the authorities of all countries that representatives of our institutions will conduct themselves according to the highest standards of responsible scientific behavior while making collections and carrying out field studies. Other institutions with systematic collections are urged to endorse the guidelines. Copies may be obtained from the undersigned. Up-to-date information on the regulations imposed by various countries may be obtained from David Challinor, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.

Preamble: Organisms, habitat types, climate, and biological principles are not limited by political boundaries. Many systematic and environmental biological research programs, of necessity, become international, cooperative undertakings. The following guidelines are intended to foster this cooperation. Anthropological and archeological studies, which may require other and different guidelines, are specifically excluded.

Section I. Each signatory institution shall:

1. Accept responsibility for the professional actions related to these guidelines of those who engage in field research under its sponsorship.
2. Accept the responsibility to protect and preserve scientifically valuable collections and other data deposited with it.
3. Make collections and data deposited with it accessible to all qualified scientists, subject to normal restrictions required for the protection and scientific use of the collections.

Section II. Guest scientists will:

1. Correspond with the appropriate scientific and other authorities in the host country, informing them of the proposed research and personnel involved in ample time to permit the development of effective cooperation.
2. Include in their programs the training of qualified students and young scientists of the host country when practical and mutually desirable.
3. Respect the laws and regulations of the host country, and make an effort to be knowledgeable concerning these laws and regulations.
4. Collect only enough specimens to satisfy reasonable scientific requirements, including limited distribution to other systematic centers, but never for commercial purposes.
5. Notify host scientists and/or other authorities in the host country of results of the expeditions or investigations by means of reports, copies of publications, and any other appropraite scientific information as soon as is practical.
6. Share with scientists of the host country the results of the cooperative field studies by division of collections and by publication of research results in media accessible to scientists of both countries.
7. Deposit types in accordance with the International Codes of Botanical and Zoological Nomenclature.

Section III. Host countries are encouraged to:

1. Enforce and extend conservation laws, particularly those relevant to protection of rare and endangered species.
2. Provide adequate mechanisms by which scientists can obtain permission to conduct studies and collect specimens.
3. Make information on pertinent legislation available to guest scientists.
4. Extend all appropriate assistance and cooperation to scientists representing the signatory institutions.

THEREFORE, in order to advance man's knowledge of his environment, and in the spirit of the true sharing in the tasks of study and documentation of the natural history of the world, I_____, (responsible officer) signify the intent of_____ (Institution) to adhere to the foregoing principles and guidelines.

_____ (Signature)

_____ (Title)

_____ (Institution)

_____ (Date)

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* The guidelines were also signed by Rollin H. Baker, Michigan State University; David M. Bates, L. H. Bailey Hortorium, Cornell University; Lincoln Constance, University Herbarium, University of California, Berkeley; R. S. Cowan, National Museum of Natural History, Smithsonian Institution; A. W. Crompton, Peabody Museum of Natural History, Yale University; J. C. Dickinson, Jr., Florida State Meseum; Roland W. Force, Bernice P. Bishop Museum; John G. Franclemont, Department of Entomology and Limnology, Cornell University; Herbert Friedman, Los Angeles County Museum of Natural History; David M. Gates, Missouri Botanical Garden; Harvey L. Gunderson, University of Nebraska Museum; Richard A. Howard, Arnold Arboretum, Harvard University; Philip S. Humphrey, Museum of Natural History, University of Kansas; George E. Lindsay, California Academy of Sciences; Ernst Mayr, Museum of Comparative Zoology, Harvard University; J. A. J. Meester, Mammal Research Unit, University of Pretoria; Martin H. Moynihan, Smithsonian Tropical Research Institute; M. Graham Netting, Carnegie Museum; Thomas D. Nicholson, American Museum of Natural History; Oliver P. Pearson, Museum of Vertebrate Zoology, University of California, Berkeley; Richard P. Phillips, San Diego Natural History Museum; H. Radclyffe Roberts, Academy of Natural Sciences, Philadelphia; Hugo G. Rodeck, University of Colorado Museum; Reed C. Rollins, Gray Herbarium, Harvard University; Alexander H. Smith, University Herbarium, University of Michigan; George Sprugel, Jr., Illinois Natural History Survey; W. C. Steere, New York Botanical Garden; E. Leland Webber, Field Museum of Natural History.

Oil Tar: Useful to Indians

The tarry patches found on beaches (Fosberg, Letters, 22 May) were used long ago by the Indians of what are now Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties of California to make their baskets waterproof. They accomplished this by heating rocks and rolling them around in the baskets with the tar.

Such patches provided the first clues to the underwater oil reservoirs which led to ocean drilling in the Santa Barbara Channel at Summerland in the late 19th century. These lumps still appear on the beach from time to time as natural oil seeps into the Channel.

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