



Summer 1981

Applied Climatology: A Study of Atmospheric Resources, John E. Hobbs

Ray Jay Davis

Recommended Citation

Ray Jay Davis, *Applied Climatology: A Study of Atmospheric Resources, John E. Hobbs*, 21 NAT. RES. J. 673 (1981).

Available at: <https://digitalrepository.unm.edu/nrj/vol21/iss3/17>

This Book Review is brought to you for free and open access by the Law Journals at UNM Digital Repository. It has been accepted for inclusion in Natural Resources Journal by an authorized editor of UNM Digital Repository. For more information, please contact disc@unm.edu.

APPLIED CLIMATOLOGY: A STUDY OF ATMOSPHERIC RESOURCES

By JOHN E. HOBBS

Boulder, CO: Westview Press. 1980. Pp. 218.

Climatology is the scientific study of the long-term condition of the atmosphere and its phenomena. Applied climatology treats the atmosphere as a human resource in the same sense we regard land, minerals, and water as resources. It considers the nature of the atmospheric physical processes, their environmental significance, and their interrelationship with other physical resources and with human resources. The science of applied climatology seeks to benefit mankind by providing us with more insight and knowledge about the atmosphere and with a greater ability to manage our atmospheric resources.

Because the atmosphere is a resource, there are policy questions concerning its wise use and protection just as there are policy issues about water resources management and conservation. And also, as in the cases of other types of resources, these policy questions often are responded to by legal norms. A few illustrations will suffice to indicate the interaction between law and the atmosphere. Air pollution control statutes and administrative regulations are a significant part of environmental law. Temperature extremes bring on human losses which may be compensated through workers' compensation laws if they are regarded as arising out of employment. Tort defendants attempt to use the "Act of God" defense when sued for negligence. Planning lawyers should take into consideration the urban "heat island" effect and the consequences of man-made temperature increases in metropolitan areas. Australian income tax law provides a rebate to residents of regions of climatological discomfort. And public utilities ratemaking uses the concept of degree-days.

Applied Climatology: A Study of Atmospheric Resources by John E. Hobbs of the University of New England in Armidale, New South Wales, Australia, treats the study of the atmosphere as a study of a natural resource. It is part of a series of studies in physical geography which is intended to present information and insights from physical geographers in such a manner that their relevance to human geography and to applied problems is clarified. Because he is reaching for an audience beyond the climatologists, Hobbs presents his materials in language that lay readers can digest. Statistical formulas and the intricacies of physics and chemistry are blessedly missing. And his Australian experience has led Hobbs to incorporate materials from

the southern hemisphere which are often slighted by authors from North America and Europe.

The book may be divided into three sections. The first, like most climatology works, considers the nature of the resource. The other two, however, go beyond that and view the relationship between man and the atmosphere. In the second section the subject is the impact of climate upon man; the third examines man's use and knowledge of the atmosphere. It is indeed a book on applied climatology.

The first section, chapters on the atmospheric system and its variation, is the most traditional part of the work. It informs the reader of the composition and structure of the atmosphere, energy in the atmospheric system, and atmospheric circulation. The atmospheric variation chapter considers the scale of variability, climatic change, air pollution, and atmospheric hazards and extremes. There are, as is the case in each chapter, suggestions for further reading.

The second section of the book looks at the influence of climate upon human behavior. It portrays the relationships between climate and comfort and health, describes the interactions between weather and society, and describes the impacts of extreme weather events and ordinary ones upon humans and their activities. Although we may seek to adapt to climate, it plays a strong role in our lives, and climatological change is often followed by cultural change.

Understanding and managing our atmospheric environment is the theme of the final part of *Applied Climatology*. Its use, like that of other resources, is enhanced by knowing more about it. Hobbs tells us of how man has altered the urban environment and explains the interaction of climate and urban planning. He examines weather forecasting techniques in use today and those of the future. Finally he introduces the reader to atmospheric resource management techniques, weather modification. He shows the magnitude of the management problems, and outlines how international cooperation among meteorologists and climatologists adds to our fund of knowledge about our atmospheric resources. As man seeks to manage the world's atmospheric resources, interactions are increased between climatologists and social and physical scientists, between scientists and lawyers, and among peoples. *Applied Climatology* introduces the reader to those interactions.

RAY JAY DAVIS

The University of Arizona
College of Law