

Bookreview

HOLZNER W., WERGER M. J. A. et I. IKUSIMA (eds.):

MAN'S IMPACT ON VEGETATION

Dr. W. Junk Publishers, The Hague, Boston and London 1983, 370 pp.

One Japanese and two European editors have joined forces to present the growing topic of man's impact on vegetation (elaborated by 33 authors, mostly well known).

The book is dedicated to professor MAKOTO NUMATA, the nestor of Japanese plant ecology (for his biography and bibliography see p. 1–6). The text is subdivided into three parts, each of them freely grouping differently aimed contributions: General aspects of man's impact upon vegetation (Part One), Man's impact in the various vegetation zones of the earth (Part Two) and Long and severely influenced areas: special features of man's impact (Part Three).

An attractive opening to the first part is "Man's attitude towards vegetation" by V. WESTHOFF. He is concerned with definitions of various degrees of the concept "natural". From this point he proceeds to the fundamental terms and definitions of this book, to the conception of "vegetation" and the evolution of man's attitude to vegetation from Judaic and Christian traditions to recent times. His conclusions consist in analyses of trends and alternatives in man's coexistence with nature. This chapter can be viewed as a polemic but an interesting basis for the other parts of the book. It is a great pity that several items cited in the text (e.g. MAAREL 1975, WEIMA 1971 or DUBOS 1972) are lacking in references. The following Chapters of the first part deal with the other general aspects of man's impact upon vegetation (comparison of the primary productivity of natural and managed vegetation, prediction of man's impact on species diversity) and the most important effects on vegetation (air pollution, aquatic changes and fire).

The most voluminous is Part Two (Chapter 7–18). It represents a relatively detailed survey of man's impacts in various types of vegetation around the world (tropical moist forest; tropical grasslands; savannas and woodlands: natural and manmade; Mediterranean vegetation; deciduous forests and grasslands; heaths; boreal forests) and special phenomena (Arctic; tree borderlines; island vegetation; urban vegetation).

Part Three consists of geographically specified examples of heavily affected areas (Central High Andes; Central Europe; Middle East; Himalayas; humid subtropics of China; secondary forest and wetlands of Japan; urban vegetation of Japan). A comparison of man's impact on vegetation in Japan and Central Europe is presented at the end of the book by W. HOLZNER.

The book is reasonably illustrated with black-and-white photos, graphs and maps. It presents a good body of knowledge for both theory and practice in one consistent branch of environmental sciences. The size spectrum of the themes is global, but owing to the generalized experience of such authorities of the European continent as PIGNATTI, SUKROP, KORNAŠ, WERGER etc. it will be useful to many workers in the field in our country.

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