

ANNOUNCEMENT

NEW BOOKS RECEIVED

The following volumes have been received from various publishers within the past year. Persons interested in being considered as possible reviewers for these works are asked to specify the title in a note to the Editor. A list of prospective reviewers is now being compiled. Those who would like their names added to this list, please notify the Editor and state your area or areas of major interest in the Quaternary sciences.

The Pre-Glacial Pleistocene of the Norfolk and Suffolk Coasts. R. G. West. Cambridge Univ. Press, New York, 1980, 203 pp.

This account provides the basis for reconstructing the environmental history of the western edge of the North Sea basin during the time immediately preceding the first local glaciation of the Pleistocene age. The environmental changes described include development of frozen ground, nature of vegetational responses, and documentation of sea-level fluctuations.

Pleistocene Mammals of North America. B. Kurten and E. Anderson. Columbia Univ. Press, New York, 1980, 442 pp.

This comprehensive guide to Blancan and Pleistocene mammals presents the theories governing their origin, evolution, and distribution in North America. The geological, geographical, and ecological settings of 250 faunas are recreated along with faunal histories, intercontinental correlations, and migration patterns. The causes of Blancan and Pleistocene extinctions are also examined.

Sea-Ice Processes and Models. Edited by R. S. Pritchard. Univ. of Washington Press, Seattle, 1980, 472 pp.

This volume contains 40 papers presented at a symposium on Sea-Ice processes sponsored by the Arctic Ice Dynamics Project of the International Commission on Snow and Ice. The contributions focus on deterministic ice modeling, sea-ice motions, and properties of boundary layers (i.e., ocean and atmosphere).

Catastrophic Flooding—The Origin of the Channeled Scabland. Edited by V. R. Baker. Dowden, Hutchinson, & Ross, Stroudsburg, Pa., 1981, 360 pp.

This most recent edition of the Benchmark Papers in Geology summarizes our understanding of the awesome processes responsible for the development of the channeled scabland of eastern Washington. The pa-

pers trace the evolution of ideas regarding this unique terrain from the landmark work of J. H. Bretz, who first described these features, to the modern research on the hydrodynamics of the Spokane flood.

Earth Rheology—Isostasy and Eustasy. Edited by N.-A. Morner. Wiley, New York, 1980, 599 pp.

The 47 papers in this volume are the written record of an interdisciplinary symposium on earth rheology and Late Cenozoic isostatic movements. The discussions include theoretical considerations of crustal depression and rebound and observational data from five continents.

The Sahara and the Nile. Edited by M. A. J. Williams and H. Faure. A. A. Balkema, Rotterdam, 1980, 607 pp.

This work focuses on Quaternary environments and prehistoric occupation in northern Africa. Recent geologic, biologic, climatologic, and archaeologic data reveal the link between our largest desert and longest river. The discussion casts new light on early human responses to environmental change in northern Africa during the Quaternary.

Arctic Pleistocene History and the Development of Submarine Permafrost. Michael Vigdorichik. Westview Press, Boulder, Colo., 1980, 286 pp.

This well-illustrated monograph explores the shelf of the Arctic Ocean and its fringing seas. The origin, distribution, and properties of submarine permafrost are discussed. Current and proposed geological exploration of this environment for oil and mineral deposits renders this work timely and relevant.

The Shaping of Southern England. Edited by David K. C. Jones. Academic Press, London/New York, 1980, 274 pp.

This compilation of essays, originally published in 1939, is regarded as a classic treatise on the geomor-

phological evolution of the British Isles. The revised edition presents new research, particularly in the fields of Quaternary studies, and illustrates the manner in which recent interpretations affect the classical models of landscape development. Topics include the Quaternary evolution of the River Thames, the Tertiary evolution of southeast England, the glaciation of the London Basin, and the erosion of chalk under periglacial conditions.

A Dynamic Stratigraphy of the British Isles. A Study of Crustal Evolution. R. Anderton, P. H. Bridges, M. R. Leeder, and B. W. Sellwood. Allen & Unwin, London, 1980, 282 pp.

Well illustrated and comprehensive, this text focuses on the geological evolution of the small but complex segment of the Earth's crust now called the British Isles. The story begins with speculation about archaic tectonics and concludes with a discussion of Late Pleistocene glacial events and the Holocene Flandrian transgression.

Studies in the Late Glacial of North-West Europe. Edited by J. J. Lowe, J. M. Gray, and J. E. Robinson. Pergamon, Oxford, 1980, 205 pp.

This volume contains papers presented at a symposium of the Quaternary Research Association held in 1979 at the University College in London. The contributions address a variety of environmental responses to the climatic variations affecting northwest Europe between 14,000 and 10,000 yr B.P. Topics range from vegetational changes and fluctuations in ice-front positions to responses by marine and terrestrial fauna.

The Quaternary of Israel. Aharon Horowitz. Academic Press, New York, 1979, 394 pp.

Horowitz, with contributions from ten specialists, has assembled an up-to-date summary of Quaternary environments of Israel. The text has broad appeal to those interested in the eastern Mediterranean: Chapters include discussions on the present environment,

pre-Quaternary geology, Quaternary stratigraphy, palynology, Quaternary fauna, anthropology, climate, and chronology. This is an excellent basic source book with numerous references.

Quaternaire et préhistoire du Nahr El Kébir Septentrional. Paul Sanlaville. Collection de la Maison de l'Orient de Méditerranéen No. 9, Série Gérie Géographique et Préhistoire No. 1, Editions du CNRS, Paris, 1979, 161 pp.

This monograph deals with the geomorphology and prehistory of the Nahr El Kébir valley in northwest Syria. Marine deposits and fluvial terraces are discussed to provide background for an analysis of the paleolithic archaeology of the region.

Solar-Terrestrial Influences on Weather and Climate. Edited by B. M. McCormac and T. A. Seliga. Reidel, Dordrecht, Holland, 1979, 346 pp.

Papers from a symposium at the Ohio State University focus on relationships of solar variability to weather and climate (e.g., influences of the 11-year sunspot cycle, the 27-day solar rotation, and special solar events such as flares and coronal holes). The participants discussed solar influences on global circulation and climate models, lower- and upper-atmosphere coupling, planetary motions, and experimental approaches to sun-weather relationships.

Submarine Permafrost on the Alaskan Continental Shelf. Michael Vigdorichik. Westview Press, Boulder, Colo., 1980, 118 pp.

This sequel to the author's *Arctic Pleistocene History and the Development of Submarine Permafrost* identifies and estimates potential hazards facing petroleum exploration and shelf development in the arctic environment. Future changes in various phases of oil and gas exploration are predicted using a computer-oriented approach. Source maps are generated that define environmentally sensitive areas of the continental shelf where submarine permafrost may occur.