

NORTH AMERICAN MOOSE. By R. L. PETERSON. University of Toronto Press, 1955. Paperback 1978.

This is the reprint of a classic. Like any classic, so Randolph L. Peterson's book on moose, first published some 28 years ago, remains a valuable and interesting source of knowledge to those concerned with moose. Upon rereading, it gives us a glimpse into the theoretical world of the mammalogist but a few decades ago, and as such is required reading for those concerned with progress in science. To those not yet familiar with it, I commend it as an example of thorough scholarship, a good reference book, and a gateway into the older English literature. It is a fascinating contrast to

books on moose of comparable age, such as that of Professors W.G. Heptner and A.A. Nasimovic (*Der Elch*, Neue-Brehm-Bücherei No. 386, 1967) an upgraded version of what is found on moose in the classis *Mammals of the U.S.S.R.* published in 1961, or Hans Kramer's *Elchwald*, the German management experience with moose, published in 1963. To date, Peterson's book is the only thorough single-author synthesis on moose in the English language, and as such is quite central to our unfolding understanding of moose.

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TRANSPORTATION IN EASTERN EUROPE: EMPIRICAL FINDINGS. By B. MIECZKOWSKI. Boulder: East European Quarterly (Distributed by Columbia University Press, New York), East European Monographs No. 38, 1978. xv + 221 pp.

Transportation in Eastern Europe, like that in other complex world regions, is a broad subject and an intrinsic part of its attendant national economy, although transportation may be analyzed as an independent phenomenon. Given the analytical techniques and methodological approaches found in the social sciences for assessment of economic sectors including transportation, and given the plethora of varied information in numerous languages on transportation in Eastern Europe, most individuals seeking to write a synthesis of the subject face a gargantuan task unless they restrict their purpose to manageable proportions, concentrate on specific themes, delegate some responsibility to specialized colleagues, assemble existing materials (perhaps through translation) into edited works, or in some other way transcend the intellectual and substantive fragmentation inherent in the task. Bogdan Mieczkowski, Professor of Economics at Ithaca College, forsaking such other approaches, has undertaken a synthesis of transportation in Eastern Europe on the basis of some of the secondary sources dealing with the topic published since 1945. The book comprises seven chapters: introduction, geographic and economic determinants, national planning, growth since 1945, costs, international aspects, and conclusions and projections.

Analysis commences with a section on geographical determinants of transport which virtually ignores the physical, human, and

economic geography of Eastern Europe and has no apparent relevance to the book. Furthermore, geographical determinism has been considered by geographers to be a fallacious term for at least half a century, and should not be used in scholarly analyses. The final section of the book, dealing with projections (pp. 196-200), is vague, subjective, and almost entirely based on a few ethereal statements concerning the near future in Poland: "The assumptions made by Polish long-range planners with regard to Poland may be cited here as an example of the expectations of growth of transport in Eastern Europe" (p. 197). The remainder of the book proceeds in a similar vein. Thus, despite the author's best intentions, this treatment of transportation in Eastern Europe is mediocre, banal, and superficial.

Few of the author's many purposes and objectives (pp. xiii-xv, 1-9) are achieved. Despite Mieczkowski's identification of major issues associated with planning transportation facilities (pp. 86-90), and discussion of issues associated with charges for transportation services (pp. 138-150), the book can be used for few of its intended purposes because it deals with Eastern Europe in name only. Analysis relies mainly on statistical data for Poland supplemented with figures for East Germany and Hungary, and on quotations and passing references for the remaining five countries of Eastern Europe, on those occasions when their existence is recognized. Concern for transportation in the book vacillates between description of historical evolution and analysis of recent problems and issues. The book, however, is neither a reasoned or scholarly antiquarian approach to transportation, a statistical handbook, nor a rigorous topical analysis. The book strikes this

reader as a pretentious and haphazard collection of tedious lecture notes which the student cannot challenge because of their specificity, their obfuscatory interpretation, and their esoteric bases of authority.

The structural confusion of the book is further compounded by weaknesses and shortcomings in the substance of its contents. Maps have been poorly reproduced from other sources without being redrawn or modified to suit this book's objectives; in many cases, they are illegible or devoid of significance. Tables are loosely spaced, wasteful of paper, and of limited analytical value; many pertain only to Poland, not to Eastern Europe. Many items that should be presented in tabular form are found instead in the text (e.g. East European countries' international economic agreements and memberships in organizations, pp. 175-185). Furthermore, these lists should not be accepted by any reader without substantial verification from up-to-date sources which also contain adequate detail on the function and content of the memberships and agreements.

The regression analyses (pp. 115-122) are devoid of graphs of relationships and analyses of residuals. Furthermore, the regression analysis of highly intercorrelated statistical series smacks of chicanery: on the one hand, the reader is warned that "regression analysis does not postulate necessary direct causation" (p. 117), but on the other hand, a subsequent argument commences (p. 119), "If causative relationship is imputed to our [regression] analysis, . . ." Not only do the data violate many of the assumptions of linear regression analysis, but the imputation of causal relation-

ship here is naive and academically irresponsible. Furthermore, although the title of the book is *Transportation in Eastern Europe*, the regressions are performed only for Poland "because to have done so for all countries of Eastern Europe would have taken up much space and (it is believed) would not have yielded substantially different results" (p. 116). The author then states on the basis of a 1965 East German reference that "The conclusions from the Polish example may be taken as representative for Eastern Europe as a whole" (p. 116). In view of the fact that the regressions were performed on Polish data for the period 1947-1973, the author has no right to extend their relevance to all of Eastern Europe, especially on the basis of imputed authority derived from passing reference to a 1965 East German source.

Thus, for many reasons, this book in its present form is inadequate and should be withdrawn from the market by the author or the publisher. The author should have restricted his book to scholarly analysis of specific topics and issues in Polish transportation since that country comprises the heart of the present book, or he should have adopted one of the many alternative productive approaches to the study of transportation in Eastern Europe. Serious students of Eastern European transportation will not benefit from reading this book and must curtail their need for a serious treatment of the subject until an adequate replacement is published.

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REVIEW OF THE MAY 1978 ISSUE OF *ARCTIC AND ALPINE RESEARCH* (Vol. 10, n. 2). Proceedings of the Symposium of the International Geographic Union Commission on High Altitude Geocology, Caucasus Mountains, USSR, July 1976.

In July of 1976, the Commission on High Altitude Geocology of the International Geographical Union conducted a symposium on mountain geocology at the University of Moscow field station in the Caucasus Mountains, U.S.S.R. Sixty experts from the physical, biological and social sciences with interests in alpine and high-latitude studies assembled from ten countries. Thirty-six papers, half of them by Soviet scientists, were presented. After two years of translation and editorial efforts, the proceedings of this symposium were published in *Arctic and Alpine Research*.

Reviewing this volume is a formidable task. Papers range in scope from natural hazards to biogeography, agriculture, and sociology. No one individual, no matter how broadly based, can hope to evaluate the quality or conclusions of all the papers contained in this volume. In all fairness to this writer's readily admitted non-omniscience and partiality to studies of natural hazards, all that can be done is to summarize the contents of the symposium so that the interested researcher may be directed to papers relevant to his or her pursuits. This is not to suggest that this symposium was ill-conceived. It is difficult to bring to mind many other geographically defined areas of study that can more fruitfully benefit from the multidisciplinary approach than alpine studies. This volume may well serve as a significant source for interdisciplinary cross-pollination.