ARAPAHO PASS — GLACIAL GEOLOGY AND ARCHEOLOGY AT THE CREST OF THE COLORADO FRONT RANGE. By JAMES B. BENEDICT. Research Report No. 3. Ward, Colorado: Center for Mountain Archeology, 1985. xii + 197 p., figs., tables, refs., appendixes. Softbound. US\$28.00.

The subtitle of this handsome and well-written monograph, "Glacial geology and archeology at the crest of the Colorado Front Range," is a nutshell summary intimating a bidisciplinary study. However, true to Quaternary studies, the breadth of subinvestigations required to place the archaeological sites in the Arapaho Pass area in geological and paleoenvironmental context expand well beyond the marriage of two disciplines.

The high energy environment of Arapaho Pass has been discontinuously utilized by man for at least the past 8500 years. Notable among the traces of human habitation are the remains of stone cairns and walls that served as a game drive system. Prior to and during this period, the processes of glaciation, snow and rock avalanche, debris flow, and cryoturbation have shaped and altered the topography of this area. In order to date the many archaeological sites scattered over more than 4 km² at elevations ranging from ca. 3400 to 3700 m and to establish the paleoenvironmental record for the area, the relative and absolute ages of the substrates of these sites and other landforms were determined. Benedict had to reach deep into the Quaternarist's bag of tricks to accomplish this task. Among these quantitative and semiquantitative methods are radiocarbon dating, lichenometry, relative weathering rind thickness analysis, and analysis of granite-surface weathering characteristics. The author used radiocarbon dating to calibrate these latter three methods. His generally favourable results will be useful to anyone interested in dating substrates in alpine or arctic environments. His use of a size frequency method in lichenometric dating of surfaces where a few individual lichens may have survived snow kill or stone overturning is particularly noteworthy in this regard. The results of these methods combined with geomorphic investigations have served to date five Neoglacial advances in the area.

The archaeological finds in this study illuminate a long and ingenious utilization of a geologically active and climatically fickle alpine environment by the first Americans. The archaeological sites have yielded tools, projectile points and other artifacts from the paleoindian to the protohistoric period. Benedict gives the game drive system special attention; it represents a hunting technology that was apparently widely used above timberline but was abandoned with the acquisition of the horse. The only historical analogue to this hunting technology comes from explorers' accounts of native hunters in the barren lands of northern Canada.

While the entire monograph may not be of interest to nonarchaeologists, the dating methodologies employed by the author should generate wide interest. Likewise, the glacial stratigraphy is a must for those interested in the Neoglacial. These last comments are not meant to diminish this work. It lucidly reports an inventive and methodical job well done.

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A GUIDE TO THE LLOYDS' MARINE COLLECTION AT GUILD-HALL LIBRARY. By CHRISTOPHER A. HALL. Aldermanbury, London EC2P 2JE: Guildhall Library, 1985. £3 plus postage.

One of the untold stories of polar history is that of the shore stations in the whaling trade on Baffin Land, organized largely from Scotland in the nineteenth century. Untold, because when the masters came home after two seasons and a winter, they were not keen to write about it. They went there to make money and it seems they did not make much, nor did their owners do too well.

There are scattered facts about those stations, the ships and masters, their take and their experience in the pages of *Lloyds List*, and they only need to be dug out. Details of ships are to be found in *Lloyds Register* and the *Register of the Society of Merchants*. One of the leading figures in that branch of the whaling trade was Mr. Noble; his career as a master is in the one published volume of *Lloyds Masters Register* and the many manuscript volumes, where are to be found many of the masters involved in that trade. All together, these facts provide the skeleton for an account of that trade. The first extant issues of *Lloyds List*, 1741, gave the sailing and return of ships in the Hudson's Bay trade; and in time the pages came to include details of the whaling trade and much other useful information.

That, and *Lloyds Register*, the *Register of the Society of Merchants* and many other registers, lists and returns were given in 1982 by the Corporation of Lloyds to the Guildhall Library, where they are readily available. Part One of this *Guide* lists the many sources of information available there. Part Two indicates what is to be found elsewhere and how to set about a search. This list makes it so much easier to use the extensive resources of the Guildhall Library.

In *Lloyds List* (1741 to date) and *Lloyds Register* (1768 to date) are to be found thousands of facts about the Greenland and Davis Straits trade. They need only to be dug out to provide the foundation for a history of the whaling trade. Those facts are to be found nowhere else. This guide shows how to get at them.

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BOOKS RECEIVED

- THE SEVENTH CONTINENT ANTARCTICA IN A RESOURCE AGE. By DEBORAH SHAPLEY. Washington, D.C.: Resources for the Future, 1985. (Resources for the Future, Inc., 1616 P Street N.W., Washington, D.C. 20036, U.S.A.) ISBN 0-915707-17-9. xiii + 315 p., maps, illus., appendix, index. Hardbound. US\$35.00.
- POPULATIONS AND BREEDING SCHEDULES OF WADERS, CHARA-DRII, IN HIGH ARCTIC GREENLAND. By HANS MELTOFTE. Copenhagen: Meddelelser om Grønland, Bioscience 16, 1985. (Nyt Nordisk Forlag, Arnold Busck A/S, Købmagergade 49, DK-1150 Copenhagen K.) ISBN 87-17-05237-8. 43 p., illus., refs. Softbound. No price indicated.
- TRAILS OF AN ALAŠKA GAME WARDEN. By RAY TREMBLAY. Anchorage, Alaska: Alaska Northwest Publishing Company, 1985. (Alaska Northwest Publishing Company, Box 4-EEE, Anchorage, Alaska 99509, U.S.A.) ISBN 0-88240-304-4. xv + 176 p. Softbound. US\$9.95, Cdn\$11.95.
- WOLF TRAIL LODGE. By EDWARD M. MOYD. Anchorage, Alaska: Alaska Northwest Publishing Company, 1985. (Alaska Northwest Publishing Company, Box 4-EEE, Anchorage, Alaska 99509, U.S.A.) ISBN 0-88240-271-4. xi + 108 p. Softbound. US\$5.95, Cdn\$6.95.
- TLINGIT INDIANS OF ALASKA. By ARCHIMANDRITE ANATOLII KAMENSKII, translated by SERGEIKAN, MARVINFALK (ed.). Fairbanks, Alaska: The University of Alaska Press, 1985. (The Rasmuson Library Historical Translation Series, Volume II. University of Alaska Press, University of Alaska, Fairbanks, Alaska 99701, U.S.A.) ISBN 0-912006-18-8. xvii + 166 p., illus., bib., glossaries, index. Softbound. US\$15.00 + 2.50 for postage & handling.
- HANDBUCH DER VÖGEL DER SOWJETUNION BAND 1 ERFOR-SCHUNGSGESCHICHTE, GAVIIFORMES, PODICIPEDIFORMES, PROCELLARIIFORMES. Edited by V.D. ILTCHEV, V.E. FLINT, et al. Wittenberg Lutherstadt: A. Ziemsen Verlag, 1985. (A. Ziemsen Verlag, Lucas-Cranach-Strasse 21, DDR 4600 Wittenberg Lutherstadt, GDR.) 350 p., illus., maps, coloured plates, refs., in German. Hardbound. 78,00 Marks.
- AN ETHNOGRAPHIC COLLECTION FROM NORTHERN SAKHALIN