

GLACIOLOGICAL LITERATURE

THIS is a selected list of glaciological literature on the scientific study of snow and ice and of their effects on the earth; for the literature on polar expeditions, and also on the "applied" aspects of glaciology, such as snow ploughs, readers should consult the bibliographies in each issue of the *Polar Record*. For Russian material the system of transliteration used is that agreed by the U.S. Board on Geographic Names and the Permanent Committee on Geographical Names for British Official Use in 1947. Readers can greatly assist by sending reprints of their publications to the Society, or by informing Dr. J. W. Glen of publications of glaciological interest. It should be noted that the Society does not necessarily hold copies of the items in this list, and also that the Society does not possess facilities for microfilming or photocopying.

GENERAL GLACIOLOGY

- GIOVINETTO, M. B. Results of glaciological research in Antarctica. *U.S. Antarctic Projects Officer. Bulletin*, Vol. 4, No. 7, 1963, p. 2-7. [Summary of recent advances in knowledge.]
- LORIUS, C. Terre Adélie. Campagne d'été 1961-1962. *Glaciologie. Territoire des Terres Australes et Antarctiques Françaises. Expéditions Polaires Françaises (Missions Paul-Emile Victor)*, Publication No. 241, 1963, 109 p. [Results of 1961-62 field season in Terre Adélie including positions and elevations of markers, mean annual temperature, accumulation, coastal regression, electrical conductivity measurements on melted snow, firn and ice. English and Russian summaries.]
- NANGERONI, G., and VANNI, M. The activities of the Italian Glaciological Committee on the occasion of the International Geophysical Year. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 3, 1963, p. 97-100.
- ØSTREM, G. Comparative crystallographic studies on ice from ice-cored moraines, snow-banks, and glaciers. *Geografiska Annaler*, Vol. 45, No. 4, 1963, p. 210-40. [Detailed and fully illustrated account of ice crystal sizes in different snow and ice deposits.]
- PAL'GOV, N. N. (ed.) *Mezhdunarodnyy Geofizicheskiy God. Glyatsiologicheskiye issledovaniya v period MGG: Zailiyskiy i Kirgizskiy Alatau, Altay [International Geophysical Year. Glaciological investigations during the period of the I.G.Y.: Zailiyskiy and Kirgizskiy Alatau, Altay]*. Vyp. 4. Alma-Ata, Izdatel'stvo Akademii Nauk Kazakhskoy SSR [Publishing House of the Academy of Sciences of the Kazakh S.S.R.], 1964. 168 p. [Fourth of series of publications of I.G.Y. results of which first three were entitled *Zailiyskiy i Dzhungarskiy Alatau*. Contains following papers, all in Russian with English summaries: N. N. Pal'gov, "Glaciers of Kazakhstan and their main regime features", p. 5-27; N. N. Pal'gov, "On discharge of thawing waters from firn field of mountain glaciers", p. 28-43; Ye. N. Vilesov, "The change of heat content of the active layer of glacier ice", p. 44-53; K. G. Makarevich, "New glaciological studies in glaciers in the Talgar basin of the Zailiyskiy Alatau", p. 54-70; K. G. Makarevich, "Problems of the regime of the left Talgar glaciers", p. 71-82; T. Ya. Tkachyk, "Direct radiation in the Zailiyskiy Alatau range mountainous zone", p. 83-90; R. G. Golovkova, Yu. S. Dyukareva, and N. D. Yegorova, "Comparative characteristics of meteorological and actinometric indices at glaciers on the upper Malaya Almatinka and Talgar rivers", p. 91-104; R. G. Golovkova, K. Sh. Diyarova, and N. D. Yegorova, "Main ablation factors of the Lednik Shokal'skogo in the Zailiyskiy Alatau range", p. 105-10; N. D. Yegorova, "Meteorological conditions of the glacierized zone in the Zailiyskiy Alatau range", p. 111-25; N. Ya. Barvenko, "Some features of glacial movement regime of the Maloalmatinskaya group of glaciers in the Zailiyskiy Alatau range", p. 126-42; V. V. Zamoruyev, "Geomorphological observations on the Berel'skiy Lednik during the summer of 1960", p. 143-49; Ye. V. Maksimov, "Results of glaciological observations in the western part of the northern slopes of Kirgizskiy Alatau", p. 150-61; G. A. Tokmagambetov and V. N. Goluber, "The texture and structure of buried ice in the moraines of the Maloalmatinskaya glaciers", p. 162-67.]
- ROBIN, G. DE Q. Glaciology. *Endeavour*, Vol. 23, No. 89, 1964, p. 102-07. [Description of the development of study of ice as a plastic material.]
- STRETEN, N. A. Some peculiarities of ice formation in MacRobertson Land. *Australian Meteorological Magazine*, No. 37, 1962, p. 29-34. [Rift in Amery Ice Shelf, inland mountain top "ice boulders" and formation of large open water pool in winter sea ice.]
- TALJAARD, J. J. Advances in knowledge of Antarctic topography, ice and meteorology since 1955. *South Africa. Weather Bureau. News Letter*, No. 161, 1962, p. 131-37.

GLACIOLOGICAL INSTRUMENTS AND METHODS

- BEAUMONT, R. T., and WORK, R. A. Snow sampling results from three samplers. *Bulletin de l'Association Internationale d'Hydrologie Scientifique*, 8e An., No. 4, 1963, p. 74-78. [Tests of two new designs and the Federal Snow Sampler.]
- BONNEMA, D. J. Jagsnceumeters op Antarktika. *South Africa. Weather Bureau. News Letter*, No. 164, 1962, p. 178-79. [History of drift-snow meters and details of meter used on second South African Antarctic Expedition, 1961.]
- BREUCK, W. DE. *Un appareil pour découper les carottes de sondage dans la glace*. Bruxelles, Presses Universitaires de Bruxelles, 1962. 4 leaves. [Description of simple apparatus for cutting firn and ice cores from drillings.]
- SCHWERTFEGER, P. An analogue computer for solving growth problems of floating ice. *Gerlands Beiträge zur Geophysik*, Bd. 73, Ht. 1, 1964, p. 44-52. [Electrical device to predict ice thickness from surface temperature data.]
- SCHWERTFEGER, P. Measurement of conducted flow of heat in a sea ice cover. *Nature*, Vol. 200, No. 4908, 1963, p. 769. [Method of measurement.]

PHYSICS OF ICE

- BARTHAKUR, N., and MAYBANK, J. Anomalous behaviour of some amino-acids as ice nucleators. *Nature*, Vol. 200, No. 4909, 1963, p. 866-68. [Experiments and discussion of mechanism.]
- BOWDEN, F. P., and TABOR, D. *The friction and lubrication of solids. Part II*. Oxford, Clarendon Press, 1964. xx, 544 p. [Ch. 8, p. 128-48, on friction, adhesion and deformation properties of ice and solid krypton; ch. 9, p. 149-58, on friction of ski on snow and ice.]
- FUKUTA, N. Ice nucleation by metaldehyde. *Nature*, Vol. 199, No. 4892, 1963, p. 475-76.
- KUROIWA, D. Internal friction of ice. *Contributions from the Institute of Low Temperature Science (Sapporo)*, Ser. A, No. 18, 1964, p. 1-62. [Paper in three parts: (1) the internal friction of H₂O and D₂O ice, and the influence of chemical impurities on mechanical damping, p. 1-37; (2) the grain boundary internal friction of ice, p. 38-48; (3) the internal friction of natural glacier ice, p. 49-62.]
- LATHAM, J. Charge transfer associated with temperature gradients in ice. *Nature*, Vol. 200, No. 4911, 1963, p. 1087. [Test of theory. Deviations shown to be due to surface effects.]
- LATHAM, J. Charge transfer associated with temperature gradients in ice crystals grown in a diffusion chamber. *Quarterly Journal of the Royal Meteorological Society*, Vol. 90, No. 385, 1964, p. 266-74. [Experiments on charge acquired during growth and on contact between ice crystals at different temperatures.]
- LIST, R. Zur Thermodynamik von Schwammeisensätzen an langsam rotierenden Zylindern. *Winterbericht des Eidgenössischen Institutes für Schnee- und Lawinenforschung*, Nr. 25, 1962, p. 105-09. [Study of the accretion of ice on slowly rotating cylinders. Also published as *Eidgenössische Kommission zum Studium der Hagelbildung und Hagelabwehr Wissenschaftliche Mitteilungen*, Nr. 42, 1963.]
- MATTHEWS, J. B., and MASON, B. J. Electrification accompanying melting of ice and snow. *Quarterly Journal of the Royal Meteorological Society*, Vol. 89, No. 381, 1963, p. 376-80.
- MOSSOP, S. C. Atmospheric ice nuclei. *Zeitschrift für angewandte Mathematik und Physik*, Vol. 14, Fasc. 5, 1963, p. 456-86. [Review article. 147 literature references. French summary.]
- TOWNSEND, A. A. Natural convection in water over an ice surface. *Quarterly Journal of the Royal Meteorological Society*, Vol. 90, No. 385, 1964, p. 248-59.

LAND ICE. GLACIERS. ICE SHELVES

- AVSYUK, G. A. Iskusstvennoye usileniye tayniya gornykh lednikov [Artificial acceleration of glacier thawing]. *Priroda [Nature]*, 1963, No. 7, p. 61-66. [Methods used in Central Asia.]
- BONDAREV, L. G. *Ocherki po oledeneniyu massiva Ak-Shiyrak [Essays on the glacierization of the Ak-Shiyrak massif]*. Frunze, Izdatel'stvo Akademii Nauk Kirgizskoy SSR [Publishing House of the Academy of Sciences of the Kirgiz S.S.R.], 1963. 202 p. [Discussion of basis of I.G.Y. results.]
- BUYNITSKIY, V. Kh. Shel'fovyye l'dy Antarktiki, ikh morfologiya, vnutrennyaya struktura i proiskhozhdeniye [Ice shelves of the Antarctic, their morphology, internal structure and origin]. *Vestnik Leningradskogo Universiteta [Messenger of Leningrad University]*, No. 18, 1963, p. 82-101. [General discussion, with list of essential facts about 55 ice shelves.]
- CHANG, F. K. Seismic wave studies in northwest Marie Byrd Land, Antarctica. *Bulletin of the Seismological Society of America*, Vol. 54, No. 1, 1964, p. 51-65. [Relation between seismic wave velocity and other physical properties of ice and snow.]
- EPSTEIN, S., and others. Oxygen-isotope ratios in Antarctic snow, firn and ice, by S. Epstein, R. P. Sharp and I. Goddard. *Journal of Geology*, Vol. 71, No. 6, 1963, p. 698-720. [O-isotope ratios in snow as a technique for measuring annual accumulation, and as a reflection of climatic changes in Antarctica.]
- EYTHÓRSSON, J. Brúarjökull hlaupinn. *Jökull*, ÁR 13, No. 3, 1963, p. 19-21. [Re-advance since 1890 of the eastern half of the margin by about 9 km. while western half had only advanced about 3 km. English summary.]
- EYTHÓRSSON, J. Variation of Iceland glaciers 1931-1960. *Jökull*, ÁR 13, No. 3, 1963, p. 31-33. [General recession.]
- GEORGII, H.-W. Der Spurenstoffgehalt des Gletscherseis. *Polarforschung*, Bd. 5, Jahrg. 32, Ht. 1-2, 1962 [pub. 1963], p. 140-44. [The concentration of ions in glacier ice from Hintereisferner (Austria) is much less than in new precipitation whereas in ice from Axel Heiberg Island it is not. This is explained by the mechanism of formation of glacier grains.]
- GIOVINETTO, M. B., and BEHRENDT, J. C. The area of ice shelves in Antarctica. *Polar Record*, Vol. 12, No. 77, 1964, p. 171-73. [Discussion of differences between estimates by I. A. Suyetova and Giovinetto.]
- GLEN, J. W. Glaciers. *Times Science Review*, Spring, 1964, p. 12-14. [General review of present knowledge.]
- GONFIANTINI, R., and others. Geographical variations of oxygen-18/oxygen-16 ratio in surface snow and ice from Queen Maud Land, Antarctica, by R. Gonfiantini, V. Togliatti, E. Tongiorgi, W. de Breuck and E. Picciotto. *Nature*, Vol. 197, No. 4872, 1963, p. 1096-98.
- HATTERSLEY-SMITH, G., and SERSON, H. Stratified water of a glacial lake in northern Ellesmere Island. *Arctic*, Vol. 17, No. 2, 1964, p. 108-11. [Saline water near the bottom of the lake seems to have been sea-water trapped by the advancing glacier.]
- JOUBERT, J.-L. Stratigraphie de la glace tempérée à l'aide de la teneur en eau liquide. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Tom 257, No. 23, 1963, p. 3638-39. [Liquid-water content of cores from a temperate glacier show a periodic variation corresponding to the annual layering.]
- KAPITSA, A. P. Moshchnost' lednikovogo pokrova sentral'nykh rayonov vostochnoy Antarktidy [Thickness of the ice cover of the central regions of eastern Antarctica]. *Geofizicheskii Byulleten' [Geophysical Bulletin]*, No. 13, 1963, p. 57-64. [Completed results for traverse "Komsomol'skaya"-South Pole made in 1959; earlier results for other traverses also given.]
- KONOVALOV, V. G. Iskusstvennoye usileniye tayniya snega i l'da v gorakh [Artificial intensification of melting of snow and ice in mountains]. *Izvestiya Vsesoyuznogo Geograficheskogo Obshchestva [News of the All-Union Geographical Society]*, Tom 95, Vyp. 4, 1963, p. 330-38. [Disadvantages of scattering dark material on glaciers.]

- KOPANEV, I. D. Rol' meteorologicheskikh usloviy v formirovaniy snezhno-ledyanoy poverkhnosti Antarktity [The role of meteorological conditions on the firm-ice cover formation in Antarctica]. *Problemy Arktiki i Antarktiki* [Problems of the Arctic and Antarctic], Vyp. 14, 1963, p. 47–52. [Discussion of factors affecting accumulation.]
- KOREVSHA, M. M. Sovremennoye oledeniye Khrebtunta-Suntar-Khayata [Present glaciation of Khrebet Suntar-Khayata]. *Rezultaty Issledovaniy po Programme Mezhdunarodnogo Geofizicheskogo Goda. Glyatsiologiya. IX Razdel Programmy MGG* [Results of Investigations in the Programme of the International Geophysical Year. Glaciology. IX Section of Programme for the I.G.Y.], No. 11, 1963, 98 p. [Results of field studies, 1956–59, in this range in Yakutskaya A.S.S.R.]
- LIESTÖL, O. Noen resultater av bremålinger i Norge 1962. *Norsk Polarinstitutt. Årbok*, 1962 [pub. 1963], p. 187–90. [Glacier regime measurements in Norway, 1962; mainly Storbreen, Jotunheimen.]
- MRKOS, A. Opredechniye osadkov kosmicheskoy pyli na poverkhnosti lednikovogo shchita vostochnoy Antarktity [Determining the deposits of cosmic dust on glacial shield of eastern Antarctica]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii* [Information Bulletin of the Soviet Antarctic Expedition], No. 32, 1962, p. 38. [Analysis of filtered residue of snow melt.]
- PEGUY, C.-P. Observations glaciologiques dans le Massif des Grandes Rousses (France). *Biuletyn Peryglacjalny* (Łódź), Nr. 11, 1962, p. 279–86. [Description of work including changes in glaciers and mass balance for the Glacier de Saint-Sorlin and the Glacier de Sarennes.]
- PICCIOTTO, E., and WILGAIN, S. Fission products in Antarctic snow: a reference level for measuring accumulation. *Journal of Geophysical Research*, Vol. 68, No. 21, 1963, p. 5965–72. [Observations of sharp rise in β activity and ^{90}Sr in 1955 snow.]
- PILLEWIZER, W. Vergleitscherung und Schneegrenze in Hochasien. *Petermanns Geographische Mitteilungen*, Jahrg. 106, Quartalshft 3, 1962, p. 186–87.
- RENAUD, A. Analyse climatique des variations de longueur des glaciers de Pizol et Sardona (Suisse). *Bulletin de la Société Vaudoise des Sciences Naturelles*, Vol. 68, Fasc. 5, No. 310, 1963, p. 195–204. [Study of causes of variations of these Swiss glaciers.]
- RENAUD, A. Quel est l'âge des glaciers? *Les Alpes. Revue du Club Alpin Suisse*, 40e An., 2e trimestre, 1964, p. 149–53. [The complexity of determining the true ages of glacier cover throughout the world.]
- RONCA, L. B. Minimum length of time of frigid conditions in Antarctica as determined by thermoluminescence. *American Journal of Science*, Vol. 262, No. 6, 1964, p. 767–81.
- SCHYTT, V. Fredrik Enquist, 1885–1963. Some comments on his glacier photographs of 1910. *Geografiska Annaler*, Vol. 45, No. 4, 1963, p. 299–302. [The recession from 1910 to 1962 of Isfallsglaciären is well illustrated with photographs.]
- SCHYTT, V., and others. Notes on glaciological activities in Kebnekaise, Sweden—1963, [by] V. Schytt, S. Jonsson and P. Cederstrand. *Geografiska Annaler*, Vol. 45, No. 4, 1963, p. 292–99. [Mass balance studies on Storglaciären during 1963. Glacier retreat studied by levelled profiles. Variations of the extent of Swedish glaciers: field work 1963.]
- STONE, K. H. Alaskan ice-dammed lakes. *Annals of the Association of American Geographers*, Vol. 53, No. 3, 1963, p. 332–49. [53 lakes in south-east Alaska and adjacent parts of Canada, described.]
- VALLON, M. Contribution à l'étude structurographique de la glace froide de haute latitude. *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences* (Paris), Tom. 257, No. 25, 1963, p. 3988–91. [Crystallography and structure of ice domes in front of the glaciers and of glacier ice from Kongsbreen, Vestspitsbergen.]
- WÖLCKEN, K. Seismische Eisdickenmessungen auf Nowaja Semlja 1932/33. *Polarforschung*, Bd. 5, Jahrg. 31, Ht. 1–2, 1961 [pub. 1963], p. 87–91. [Seismic measurements of thickness of ice on Novaya Zemlya, 1932–33. English summary.]

ICEBERGS. SEA, RIVER AND LAKE ICE

- DUNBAR, MOIRA, and WITTMAN, W. I. Some features of ice movement in the Arctic Basin. (*In Proceedings of the Arctic Basin Symposium, Hershey, Pa., October 1962* [pub. 1963], p. 90–108.)
- KHEYSIN, D. YE. Rasprostraneniye dlinnyykh gravitatsionnykh voln v more, pokrytom melkobitom l'dom [Distribution of long gravitational waves in sea covered by small floes and brash ice]. *Problemy Arktiki i Antarktiki* [Problems of the Arctic and Antarctic], Vyp. 14, 1963, p. 61–66.
- KUSUNOKI, K., and ONO, N. Ice conditions in Lützw-Holm Bay, Antarctica 1956–59, presented on the basis of photo-interpretation. *Contributions from the Institute of Low Temperature Science* (Sapporo), Ser. A. No. 19, 1964, p. 1–21. [Sea-ice conditions in the bay are studied on the basis of shipboard observations and air photos.]
- LUNDE, T. Sea ice in the Svalbard region 1957–1962. *Norsk Polarinstitutt. Årbok*, 1962 [pub. 1963], p. 24–34.
- ORVIG, S. Energy exchange, air-ice-water. (*In Proceedings of the Arctic Basin Symposium, Hershey, Pa., October 1962* [pub. 1963], p. 231–43.) [General discussion of problem of heat balance determination for Arctic Ocean.]
- ROBERTS, B. B., and ARMSTRONG, T. E. Proposed new terms and definitions of sea ice for the use of submariners. *Polar Record*, Vol. 12, No. 77, 1964, p. 197–98.
- TURANOV, I. M. Rezultaty nablyudeniy nad staivaniyem l'da v Bukhte Dikson v 1957 g. [Results of observations on the thawing of the ice in Bukhta Dikson in 1957]. *Trudy Arkticheskogo i Antarkticheskogo Nauchno-Issledovatel'skogo Instituta* [Transactions of the Arctic and Antarctic Research Institute], Tom 248, 1963, p. 37–41. [Observation of experimental area of 100 m.² of sea ice.]
- UNTERSTEINER, N. Ice budget of the Arctic Ocean. (*In Proceedings of the Arctic Basin Symposium, Hershey, Pa., October 1962* [pub. 1963], p. 219–30.) [General discussion of mass and heat budget of sea ice. Discussion by W. I. Wittman, p. 227–30.]
- UNTERSTEINER, N., and SOMMERFELD, R. Supercooled water and the bottom topography of floating ice. *Journal of Geophysical Research*, Vol. 69, No. 6, 1964, p. 1057–62. [Experiments to verify presence of supercooled water under tabular icebergs in Arctic Ocean.]

- VOWINKEL, E. Ice transport in the East Greenland current and its causes. *Arctic*, Vol. 17, No. 2, 1964, p. 111-19. [Ice is transported (a) by ocean currents, and (b) by wind.]
- WELLMAN, H. W., and WILSON, A. T. Salts on sea ice in McMurdo Sound, Antarctica. *Nature*, Vol. 200, No. 4905, 1963, p. 462-63. [Explanation in terms of freezing of sea-water percolating through cold snow.]

GLACIAL GEOLOGY

- ANDREWS, J. T. The cross-valley moraines of north-central Baffin Island: a quantitative analysis. *Geographical Bulletin* (Ottawa), No. 20, 1963, p. 82-129. [Re-examination of hypothesis of their genesis.]
- ANDREWS, J. T. Cross-valley moraines of the Rimrock and Isortoq river valleys, Baffin Island, N.W.T.—a descriptive analysis. *Geographical Bulletin* (Ottawa), No. 19, 1963, p. 49-77.
- ANDREWS, J. T., and SIM, V. W. Examination of the carbonate contents of the drift in the area of Foxe Basin, N.W.T. *Geographical Bulletin* (Ottawa), No. 21, 1964, p. 44-53. [Evidence that the eastward movement of ice across the island was followed by a later westward flow.]
- BROECKER, W. S. Radiocarbon ages of Antarctic materials. *Polar Record*, Vol. 11, No. 73, 1963, p. 472-73. [Warning on systematic error in ^{14}C dating of material from cold oceans.]
- CARDENAS, A. L. El glaciarioismo Pleistoceno en las cabeceras del Chama. *Revista Geográfica* (Universidad de los Andes. Instituto de Geografía. Mérida, Venezuela), Vol. 3, No. 8, 1961-62, p. 173-94. [Account of the Pleistocene glacierization in the Chama valley, Venezuela.]
- DAHL, R. Shifting ice culmination, alternating ice covering and ambulant refuge organisms? A discussion of the question of ice-free areas in Scandinavia during the last Ice Age. *Geografiska Annaler*, Vol. 45, Nos. 2-3, 1963, p. 122-38.
- DAVIES, W. E. Glacial geology of northern Greenland. *Polarforschung*, Bd. 5, Jahrg. 31, Ht. 1-2, 1961 [pub. 1963], p. 94-103. [Field-work by U.S. Air Force Cambridge Research Laboratories, 1956-60. German summary.]
- HEINZELIN, J. DE. Carte des extensions glaciaires du Ruwenzori (versant congolais). *Biuletyn Peryglacjalny* (Łódź), Nr. 11, 1962, p. 133-39. [Project for mapping former ice limits on the Congolese side of Ruwenzori. General description of moraines and periglacial phenomena.]
- HOLLIN, J. T. Origin of ice ages: an ice shelf theory for Pleistocene glaciation. *Nature*, Vol. 202, No. 4937, 1964, p. 1099-1100. [Discussion of A. T. Wilson's paper with same title in *Nature*, Vol. 201, No. 4915, 1964, p. 147-49. on the effects of instability of the Antarctic Ice Sheet.]
- HUANG P'EI-HUA. Kuan-yü ch'ang-chiang yi-nan ti-ch'ü ping-ch'uan yi-chi wen-t'i [On the relic glaciers in the area south of the Yang-tze river]. *Kexue Tongbao* (*K'o-hsüeh T'ung-pao*) [*Scientia*], 1963, No. 10, p. 29-33. [Reply to criticisms by T'sao and others, *ibid.*, 1963, No. 3, p. 29-30, and by Wu and others, *ibid.*, 1963, No. 6, p. 31-35, of author's view that glaciers did not occur in this area.]
- IVES, J. D. Deglaciation and land emergence in north-eastern Foxe Basin. *Geographical Bulletin* (Ottawa), No. 21, 1964, p. 54-65. [Glaciation and deglaciation of the Baffin Island-Foxe Basin area, and the regional significance of the results.]
- IVES, J. D. Field problems in determining the maximum extent of Pleistocene glaciation along the eastern Canadian seaboard—a geographer's point of view. (In Löve, Å., and Löve, D., ed. *North Atlantic biota and their history*. Oxford, Pergamon Press, 1963, p. 337-54.)
- LEE, H. A. Method of deglaciation, age of submergence and rate of uplift west and east of Hudson Bay, Canada. *Biuletyn Peryglacjalny* (Łódź), Nr. 11, 1962, p. 239-45.
- LIESTÖL, O. Et sennglacialt brefframstøt ved Hardangerjøkulen. *Norsk Polarinstitutt. Årbok*, 1962 [pub. 1963], p. 132-39. [Study of moraine ridges, north-west Hardangervidda, south Norway, indicating glacier advance in late glacial time. English summary.]
- LINTON, D. L. The forms of glacial erosion. *Institute of British Geographers. Publication No. 33*, Transactions and Papers, 1963, p. 1-28. [Presidential address surveying various forms of glacial erosion.]
- LINTON, D. L. Glacial erosion on soft-rock outcrops in central Scotland. *Biuletyn Peryglacjalny* (Łódź), Nr. 11, 1962, p. 247-57. [Description of features attributable to glacial action and discussion of enormous effect of glacial erosion in this area.]
- LOUIS, H. Die vom Grundrelief bedingten Typen glazialer Erosionslandschaften. *Biuletyn Peryglacjalny* (Łódź), Nr. 11, 1962, p. 259-70. [General discussion of mountain landforms of glacial erosion and variations arising from differences of pre-glacial relief.]
- MACKAY, J. R., and MATHEWS, W. H. The role of permafrost in ice-thrusting. *Journal of Geology*, Vol. 72, No. 3, 1964, p. 378-80. [Discussion of paper by W. O. Kupsch ("Ice thrust wedges in western Canada", *Journal of Geology*, Vol. 70, No. 5, 1962, p. 582-94) and conclusion that permafrost assists formation of ice-thrust ridges or *Stauchmoränen*.]
- NORRIS, S. E. Permeability of glacial till. *U.S. Geological Survey. Professional Paper* 450-E, No. 224, 1963, p. 150-51.
- NORRMAN, J. O. Lake Vättern. Investigations on shore and bottom morphology. *Geografiska Annaler*, Vol. 46, Nos. 1-2, 1964, p. 1-238. [Very full account, including ice recession in the Quaternary, hydrology and present-day ice conditions.]
- ØSTREM, G. Ice-cored moraines in the Kebnekajse area. *Biuletyn Peryglacjalny* (Łódź), Nr. 11, 1962, p. 271-78. [Observations of ice-cored moraines and investigation into nature of ice which is not glacier ice in origin.]
- PASCHINGER, H. Glazialmorphologische Studien in der Neumarkter Passlandschaft. *Mitteilungen des Naturwissenschaftlichen Vereins für Steiermark*, Bd. 93, Sonderband, 1963, p. 63-72. [Glacial geomorphology of the country to the south-east of the Seetaler Alpen, Austria.]
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ERRATUM

Vol. 5, No. 38, p. 221, caption to Fig. 2:

For "Early spring condition"
read "Late summer condition".

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