

U.S. DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

BIBLIOGRAPHY OF QUATERNARY GEOLOGY,
COPPER RIVER BASIN AND ADJACENT AREAS, SOUTH-CENTRAL ALASKA

by

Oscar J. Ferrians, Jr.¹
U.S. Geological Survey

Open-File Report 91-107-A

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

¹4200 University Drive, Anchorage, AK 99508

- Ager, T.A., 1982, Vegetational history of western Alaska during the Wisconsin glacial interval and the Holocene, in Hopkins, D.M., Mathews, J.V., Jr., Schweger, C.E., and Young, S.B., eds., *Paleoecology of Beringia*: New York, Academic Press, p. 75-93.
- Ager, T.A., 1983, Holocene vegetation history of Alaska, in Wright, H.E., Jr., (ed.), *Late Quaternary environments of the United States, the Holocene*: Minneapolis, University of Minnesota Press, v. 2, p. 128-140.
- Ager, T.A., 1989, History of late Pleistocene and Holocene vegetation in the Copper River Basin, south-central Alaska, in Carter, L.D., Hamilton, T.D., and Galloway, J.P., eds., *Late Cenozoic history of the interior basins of Alaska and the Yukon*: U.S. Geological Survey Circular 1026, p. 89-92.
- Ager, T.A., and Brubaker, L., 1985, Quaternary palynology and vegetational history of Alaska, in Bryant, V.M., Jr., and Holloway, R.G., eds., *Pollen records of late-Quaternary North American sediments*: Dallas, Texas, American Association of Stratigraphic Palynologists Foundation, p. 353-384.
- Ager, T.A., and Sims, J.D., 1981, Holocene pollen and sediment record from the Tangle Lakes area, central Alaska: *Palynology*, v. 5, p. 85-98.
- Benson, C.S., 1968, Glaciological studies on Mount Wrangell, Alaska, 1961: *Arctic*, v. 21, no. 3, p. 127-152.
- Benson, C.S., and Motyka, R.J., 1976, Preliminary results of research at the active summit of Mount Wrangell, Alaska [abs.]: *Eos (American Geophysical Union Transactions)*, v. 57, no. 2, p. 88.
- Benson, C.S., and Motyka, R.J., 1978, Glacier-volcano interactions on Mount Wrangell, Alaska, in Annual report 1977-1978: Fairbanks, University of Alaska Geophysical Institute, p. 1-25.
- Black, R.F., 1958, Copper River plateau, in Williams, Howell, ed., *Landscapes of Alaska*: Berkeley and Los Angeles, University of California Press, p. 34-37.
- Brice, James, 1971, Measurement of lateral erosion at proposed river crossing sites of the Alaska pipeline: U.S. Geological Survey Open-File Report 539, 39 p.

- Brooks, A.H., 1906, The geography and geology of Alaska; a summary of existing knowledge, with a section on climate, by Cleveland Abbe, Jr., and a topographic map and description thereof, by R.U. Goode: U.S. Geological Survey Professional Paper 45, 327 p., 1 plate.
- Capps, S.R., 1910, Glaciation on the north side of the Wrangell Mountains, Alaska: *Journal of Geology*, v. 18, no. 1, p. 33-57.
- Capps, S.R., 1912, Glaciation of the Alaska Range: *Journal of Geology*, v. 20, no. 5, p. 415-437.
- Capps, S.R., 1932, Glaciation in Alaska, in Shorter contributions to general geology, 1931: U.S. Geological Survey Professional Paper 170-A, p. 1-8.
- Carter, L.D., Hamilton, T.D., and Galloway, J.P., eds., Late Cenozoic history of the interior basins of Alaska and the Yukon: U.S. Geological Survey Circular 1026, 114 p.
- Chapin, Theodore, 1918, The Nelchina-Susitna region, Alaska: U.S. Geological Survey Bulletin 668, 67 p.
- Childers, J.M., 1975, Channel erosion surveys along southern segment of the TAPS route, Alaska, 1972 and 1973: U.S. Geological Survey Open-File Report (basic data), 57 p.
- Childers, J.M., Nauman, J.W., Kernodle, D.R., and Doyle, P.F., 1978, Water resources along the TAPS route, Alaska, 1970-1974: U.S. Geological Survey Open-File Report 78-137, 136 p.
- Clarke, G.K.C., Cross, G.M., and Benson, C.C., 1989, Radar imaging of glaciovolcanic stratigraphy, Mount Wrangell caldera, Alaska: Interpretation model and results: *Journal of Geophysical Research*, v. 94, no. B6, p. 7237-7249.
- Connor, C.L., 1982, Pollen evidence for a mid-Wisconsin interstadial event in south-central Alaskan glacio-lacustrine sediments [abs.]: Program and Abstracts, American Quaternary Association Seventh Biennial Conference, June 28-30, 1982, University of Washington, Seattle, p. 84.
- Connor, C.L., 1982, Pollen evidence for a mid-Wisconsin interstadial event in south-central Alaskan lacustrine sediments [abs.]: Geological Association of Canada, Mineralogical Association of Canada, Program and Abstracts, v. 7, p. 43.

- Connor, C.L., 1983, Late Pleistocene paleoenvironmental history of the Copper River Basin, south-central Alaska, in Thorson, R.M., and Hamilton, T.D., eds., Glaciation in Alaska, extended abstracts from a workshop: University of Alaska Museum Occasional Paper 2, p. 30-34.
- Connor, C.L., 1984, Late Quaternary pollen record from the Copper River Basin, south-central Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 276.
- Connor, C.L., 1984, Late Quaternary glaciolacustrine and vegetation history of the Copper River Basin, south-central Alaska: Missoula, University of Montana, Ph.D. dissertation, 81 p.
- Connor, C.L., 1984, A middle Wisconsin pollen record from the Copper River Basin, south-central Alaska, in Coonrad, W.L., and Elliot, R.L., eds., The United States Geological Survey in Alaska: Accomplishments during 1981: U.S. Geological Survey Circular 868, p. 102-103.
- Coulter, H.W., Hopkins, D.M., Karlstrom, T.N.V., Péwé, T.L., Wahrhaftig, Clyde, and Williams, J.R., 1965, Extent of glaciations in Alaska: U.S. Geological Survey Miscellaneous Investigations Map I-415, scale 1:2,500,000.
- Dadisman, S.V., 1980, Radiometric ages of rocks in south-central Alaska and western Yukon Territory: U.S. Geological Survey Open-File Report 80-183, 80 p.
- Dobrovolny, Ernest, Schmoll, H.R., and Yehle, L.A., 1969, Geologic environmental factors related to TAPS (Trans-Alaska Pipeline System) from Valdez to Fairbanks, Alaska: U.S. Geological Survey Open-File Report 69-76 (391), 1 sheet.
- Doyle, P.F., 1977, Streamflow and channel erosion along the TAPS route, in Blean, K.O., ed., The United States Geological Survey in Alaska: Accomplishments during 1976: U.S. Geological Survey Circular 751-B, p. B7.
- Doyle, P.F., and Childers, J.M., 1977, Channel erosion surveys along the TAPS route, Alaska, 1976: U.S. Geological Survey Open-File Report 77-170, 93 p.
- Emery, P.A., Jones, S.H., and Glass, R.L., 1985, Water resources of the Copper River Basin, Alaska: U.S. Geological Survey Hydrologic Investigations Atlas HA-686, 3 sheets.

- Emmel, K.S., and Coonrad, P.L., 1982, Geological literature on the Copper River Basin and middle Tanana River basin, Alaska: Alaska Division of Geological and Geophysical Surveys Special Report 30, 11 p.
- Emmett, W.W., 1972, The hydraulic geometry of some Alaskan streams south of the Yukon River: U.S. Geological Survey Open-File Report 72-108, 102 p.
- Eyles, Nicholas, 1984, Sediments in large late Quaternary glaciolacustrine basins (Copper River, Alaska, and Great Lakes, Canada): Application to pre-Quaternary sequences [abs.]: Geological Society of America Abstracts with Program, v. 16, no. 5, p. 282.
- Ferrians, O.J., Jr., 1963, Till-like glaciolacustrine deposits in the Copper River Basin, Alaska [abs.]: Geological Society of America Special Report 73, p. 151.
- Ferrians, O.J., Jr., 1963, Glaciolacustrine diamicton deposits in the Copper River Basin, Alaska, in Short papers in geology and hydrology 1963: U.S. Geological Survey Professional Paper 475-C, p. C121-C125.
- Ferrians, O.J., Jr., 1964, Distribution and character of permafrost in the discontinuous permafrost zone of Alaska, in Brown, R.J.E., ed., Canadian Regional Permafrost Conference, Edmonton, Alberta, December 1-2, 1964, Proceedings: Ottawa, National Research Council of Canada, Associate Committee on Soil and Snow Mechanics Technical Memorandum No. 86, p. 15-16.
- Ferrians, O.J., Jr., 1965, Permafrost map of Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-445, scale 1:2,500,000.
- Ferrians, O.J., Jr., 1966, Permafrost map of Alaska, in Permafrost, International Conference, Lafayette, Indiana, November 11-15, 1963, Proceedings: Washington, D.C., National Academy of Sciences, National Research Council Publication 1287, p. 172.
- Ferrians, O.J., Jr., 1966, Effects of the earthquake of March 27, 1964, in the Copper River Basin area, Alaska: U.S. Geological Survey Professional Paper 543-E, p. E1-E28.
- Ferrians, O.J., Jr., 1971, Effects of the earthquake of March 27, 1964, in the Copper River Basin area, Alaska p. 282-283, Abstract, in The great Alaska earthquake of 1964; geology: National Academy of Sciences Publication 1601, 834 p.

- Ferrians, O.J., Jr., 1971, Preliminary engineering geologic maps of the proposed trans-Alaska pipeline route, Gulkana quadrangle: U.S. Geological Survey Open-File Report 71-102 (494), scale 1:125,000, 2 sheets.
- Ferrians, O.J., Jr., 1971, Preliminary engineering geologic maps of the proposed trans-Alaska pipeline route, Valdez quadrangle: U.S. Geological Survey Open-File Report 71-104 (495), scale 1:125,000, 2 sheets
- Ferrians, O.J., Jr., 1984, Pleistocene glacial history of the northeastern Copper River Basin, Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 282.
- Ferrians, O.J., Jr., 1989, Glacial Lake Atna, Copper River Basin, Alaska, in Carter, L.D., Hamilton, T.D., and Galloway, J.P., eds., Late Cenozoic history of the interior basins of Alaska and the Yukon: U.S. Geological Survey Circular 1026, p. 85-88.
- Ferrians, O.J., Jr., Kachadoorian, Reuben, and Greene, G.W., 1969, Permafrost and related engineering problems in Alaska: U.S. Geological Survey Professional Paper 678, 37 p.
- Ferrians, O.J., Jr., and Nichols, D.R., 1965, Copper River Basin, in Schultz, C.B., and Smith, H.T.U., eds., Guidebook for Field Conference F, central and south central Alaska--International Association for Quaternary Research, 7th Congress, U.S.A., 1965: Lincoln, Nebraska, Nebraska Academy of Sciences, p. 93-114.
- Ferrians, O.J., Jr., Nichols, D.R., and Williams, J.R., 1983, Copper River Basin, in Péwé, T.L., and Reger, R.D., eds., Guidebook to permafrost and Quaternary geology along the Richardson and Glenn Highways, between Fairbanks and Anchorage, Alaska: Alaska Division of Geological and Geophysical Surveys Guidebook 1, p. 137-175.
- Ferrians, O.J., Jr., Nichols, D.R., and Williams, J.R., 1989, Copper River Basin, in Péwé, T.L., and Reger, R.D., eds., 1989, Quaternary geology and permafrost along the Richardson and Glenn Highways between Fairbanks and Anchorage, Alaska: 28th International Geological Congress, Field Trip Guidebook T102, Washington, D.C., American Geophysical Union, p. 39-44.

- Ferrians, O.J., Jr., Nichols, D.R., and Schmoll, H.R., 1958, Pleistocene volcanic mudflow in the Copper River Basin, Alaska [abs.]: Geological Society of America Bulletin, v. 69, no. 12, p. 1563.
- Ferrians, O.J., Jr., and Schmoll, H.R., 1957, Extensive proglacial lake of Wisconsin age in the Copper River Basin, Alaska [abs.]: Geological Society of America Bulletin, v. 68, no. 12, p. 1726.
- Galloway, J.P., 1984, Bibliography of published radiocarbon dates for Alaska: U.S. Geological Survey Open-File Report 84-21, 42 p.
- Gatto, L.W., Merry, C.J., McKim, H.L., and Lawson, D.E., 1980, Environmental analysis of the upper Susitna River basin using landsat imagery: U.S. Army Cold Regions Research and Engineering Laboratory (CRREL) Report 80-4, 41 p.
- Grantz, Arthur, 1953, Preliminary report on the geology of the Nelchina area, Alaska: U.S. Geological Survey Open-File Report 53-79, 2 p., maps and sections.
- Grantz, Arthur, 1956, Possible origin of the placer gold deposits of the Nelchina area, Alaska [abs.]: Geological Society of America Bulletin, v. 67, no. 12, pt. 2, p. 1807.
- Grantz, Arthur, 1980, Geologic map of the Talkeetna Mountains (A-1) quadrangle and the south third of the Talkeetna Mountains (B-1) quadrangle, Alaska: U.S. Geological Survey Miscellaneous Investigations Map I-314, scale 1:48,000.
- Grantz, Arthur, White, D.E., Whitehead, H.C., and Tagg, A.R., 1962, Saline springs, Copper River lowland, Alaska: American Association of Petroleum Geologists Bulletin, v. 46, no. 11, p. 1990-2002.
- Greene, G.W., Lachenbruch, A.H., and Brewer, M.C., 1960, Some thermal effects of a roadway on permafrost, in Geological Survey Research 1960: U.S. Geological Survey Professional Paper 400-B, p. B141-144..
- Hamilton, T.D., Reed, K.O., and Thorson, R.M., 1986, Glaciation in Alaska--Introduction and overview, in Hamilton, T.D., Reed, K.O., and Thorson, R.M., eds., Glaciation in Alaska--The geologic record: Anchorage, Alaska Geological Society, p. 1-8.

- Hamilton, T.D., and Thorson, R.M., 1983, The Cordilleran ice sheet in Alaska, in Porter, S.C., ed., The late Pleistocene, v. 1, of Wright, H.E., ed., Late-Quaternary environments of the United States: Minneapolis, University of Minnesota, p. 38-52.
- Hansen, H.P., 1953, Post glacial forests in the Yukon Territory and Alaska: American Journal of Science, v. 251, no. 7, p. 505-542.
- Hansen, W.R., Eckel, E.B., Schaem, W.E., Lyle, R.E., George, Warren, and Chance, Genie, 1966, The Alaska Earthquake, March 27, 1964: Field investigations and reconstruction effort: U.S. Geological Survey Professional Paper 541, 111 p.
- Ives, P.C., Levin, Betsy, Robinson, R.D., and Rubin, Meyer, 1964, U.S. Geological Survey radiocarbon dates VII: Radiocarbon, v. 6, p. 37-76.
- Kachadoorian, Reuben, Hopkins, D.M., and Nichols, D.R., 1954, A preliminary report of geological factors affecting highway construction in the area between the Susitna and Maclaren Rivers, Alaska: U.S. Geological Survey Open-File Report 54-137 (92), 74 p.
- Kachadoorian, Reuben, and Péwé, T.L., 1955, Engineering geology of the southern half of the Mr. Hayes A-5 quadrangle, Alaska: U.S. Geological Survey Open-File Report 55-78 (110), scale 1:40,000 (with text, 27 p.) 1 sheet.
- Karlstrom, T.N.V., 1965, Upper Cook Inlet area and Matanuska River valley, in Schultz, C.B., and Smith H.T.U., eds., Guidebook for Field Conference F, central and south central Alaska--International Association for Quaternary Research, 7th Congress, U.S.A., 1965: Lincoln, Nebraska, Nebraska Academy of Sciences, p. 114-141.
- Karlstrom, T.N.V., and others, 1964, Surficial geology of Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-357, scale 1:584,000.
- Kreig, R.A., and Reger, R.D., 1982, Air-photo analysis and summary of landform soil properties along the route of the Trans-Alaska Pipeline System: Alaska Division of Geological and Geophysical Surveys Special Report 66, 149 p.

- Lair, J.D., and Stephen, C.D., 1980, Eastern Gulf of Alaska seismicity: Quarterly report to the National Oceanic and Atmospheric Administration for April 1, 1980 through June 30, 1980: U.S. Geological Survey Open-File Report 80-943, 8 p.
- Lamke, R.D., 1972, Floods in the summer of 1971 in south-central Alaska: U.S. Geological Survey Open-File Report 542, 88 p.
- Lawson, D.E., 1977, Sedimentation in the terminus region of the Matanuska Glacier, Alaska: Urbana, University of Illinois, Ph.D. dissertation, Ann Arbor, Michigan, University Microfilm, 294 p.
- Lawson, D.E., 1979, A comparison of the pebble orientations in ice and deposits of the Matanuska Glacier, Alaska: Journal of Geology, v. 87, p. 629-645.
- Lawson, D.E., 1979, Characteristics and origins of the debris and ice, Matanuska Glacier, Alaska: Journal of Glaciology, v. 23, p. 437-438.
- Lawson, D.E., 1979, Sedimentological analysis of the western terminus region of the Matanuska Glacier, Alaska: U.S. Army Cold Regions Research and Engineering Laboratory (CRREL) Report 79-9, 112 p.
- Lawson, D.E., 1981, Distinguishing characteristics of diamictons formed at the margin of the Matanuska Glacier, Alaska, in Proceedings, Symposium on Processes of Glacier Erosion and Sedimentation, Geilo, Norway, August 1980: Annals of Glaciology, v. 2, p. 78-84.
- Lawson, D.E., 1981, Sedimentological characteristics and classification of depositional processes and deposits in the glacial environment: U.S. Army, Cold Regions Research and Engineering Laboratory (CRREL) Report 81-27, 16 p.
- Lawson, D.E., 1982, Mobilization, movement and deposition of active subaerial sediment flows, Matanuska Glacier, Alaska: Journal of Geology, v. 90, no. 3, p. 279-300.
- Lawson, D.E., 1983, Overview of the Matanuska Glacier, in Péwé, T.L., and Reger, R.D., eds., Guidebook to permafrost and Quaternary geology along the Richardson and Glenn Highways, between Fairbanks and Anchorage: Alaska Division of Geological and Geophysical Surveys Guidebook 1, p. 177-183.

- Lawson, D.E., and Kulla, J., 1978, An oxygen isotope investigation of the origin of the basal ice of the Matanuska Glacier, Alaska: *Journal of Geology*, v. 86, p. 673-685.
- Levin, Betsy, Ives, P.C., Oman, C.L., and Rubin, Meyer, 1965, U.S. Geological Survey Radiocarbon dates VIII: *Radiocarbon*, v. 7, p. 372-398.
- Loeffler, R.M., and Childers, J.M., 1978, Channel erosion surveys along the TAPS route, Alaska 1977: U.S. Geological Survey Open-File Report 78-611, 90 p.
- Mendenhall, W.C., 1900, A reconnaissance from Resurrection Bay to Tanana River, Alaska, in 1898: U.S. Geological Survey 20th Annual Report, 1898-99, Pt. VII--Exploration in Alaska in 1898, p. 265-340.
- Mendenhall, W.C., 1905, Geology of the central Copper River region, Alaska: U.S. Geological Survey Professional Paper 41, 133 p.
- Military Geology Branch, U.S. Geological Survey, 1955, Certain engineering aspects of the geology along the Glenn and Richardson Highways, Copper River Basin, Alaska (preliminary report): Office of Chief of Engineers, U.S. Army, Engineer Intelligence Study No. 190, 20 p., 18 pls. (Prepared by O.J. Ferrians, Jr., and others).
- Military Geology Branch, U.S. Geological Survey, 1959, Terrain and construction materials, Denali area, Alaska: Office of the Chief of Engineers, U.S. Army, Engineer Intelligence Study 248, 56 p., 34 figs., 3 pls., scale 1:50,000 (prepared by D.R. Nichols).
- Military Geology Branch, U.S. Geological Survey, 1959, Terrain study of the Exercise Little Bear area, central Copper River Basin, Alaska: Office of the Chief of Engineers, U.S. Army, Engineer Intelligence Study 258, 50 p., 45 figs., 27 pls., scales 1:50,000 and 1:250,000 (prepared by J.R. Williams and others).
- Military Geology Branch, U.S. Geological Survey, 1960, Terrain study of the Delta River region, Alaska: Office of the Chief of Engineers, U.S. Army, Engineer Intelligence Study 264, 46 p., 37 figs., 22 pls., scale 1:50,000 and 1:250,000 (prepared by T.L. Péwé).

- Military Geology Branch, U.S. Geological Survey, 1960, Terrain study of the Exercise Willow Freeze area, Alaska: Office of the Chief of Engineers, U.S. Army, Engineer Intelligence Study 292, 87 p., 61 figs., 21 pls., scales 1:50,000 and 1:250,000 (prepared by O.J. Ferrians, Jr., and others).
- Miller, T.P., and Smith, R.L., 1976, Ash flows associated with Wrangell Volcano, in Cobb, E.H., ed., The United States Geological Survey in Alaska: Accomplishments during 1975: U.S. Geological Survey Circular 733, p. 52.
- Moffit, F.H., 1912, Headwater regions of Gulkana and Susitna Rivers, Alaska, with accounts of the Valdez Creek and Chistochina placer districts: U.S. Geological Survey Bulletin 498, 82 p.
- Moffit, F.H., 1932, The Slana district, upper Copper River region: U.S. Geological Survey Bulletin 824, p. 111-124.
- Moffit, F.H., 1936, Upper Copper and Tanana Rivers: U.S. Geological Survey Bulletin 868-C, p. 135-143.
- Moffit, F.H., 1938, Geology of Chitina Valley and adjacent area, Alaska: U.S. Geological Survey Bulletin 894, 137 p.
- Moffit, F.H., 1938, Geology of the Slana-Tok district, Alaska: U.S. Geological Survey Bulletin 904, 54 p.
- Moffit, F.H., 1954, Geology of the eastern part of the Alaska Range and adjacent area: U.S. Geological Survey Bulletin 989-D, 218 p.
- Motyka, R.J., Hawkins, D.B., Poreda, R.J., and Jeffries, A., 1986, Geochemistry, isotopic composition, and origin of fluid emanating from mud volcanoes in the Copper River Basin, Alaska: Alaska Division of Geological and Geophysical Surveys Public Data File 86-34, 87 p.
- Nauman, J.W., and Kernodle, D.R., 1973, Field water-quality information along the proposed trans-Alaska pipeline corridor, September 1970 through September 1972: U.S. Geological Survey Open-File Report 582, 22 p.
- Nichols, D.R., 1956, Permafrost and ground-water conditions in the Glennallen area, Alaska: U.S. Geological Survey Open-File Report 56-91 (141), 18 p.

- Nichols, D.R., 1960, Slump structures in Pleistocene lake sediments, Copper River Basin, Alaska, in Short papers in the geological sciences 1960: U.S. Geological Survey Professional Paper 400-B, p. B353-354.
- Nichols, D.R., 1963, Origin of the course of the Copper River, Alaska [abs]: Geological Society of America Special Paper 73, p. 210.
- Nichols, D.R., 1965, Glacial history of the Copper River Basin [abs.]: International Association for Quaternary Research Congress, 7th, Boulder, Colorado, Abstract Volume, p. 360.
- Nichols, D.R., 1966, Permafrost in the Recent Epoch, in Permafrost, International Conference, Lafayette, Ind., November 11-15, 1963, Proceedings: Washington, D.C., National Academy of Sciences, National Research Council Publication 1287, p. 172-175.
- Nichols, D.R., 1984, Quaternary events in the southeastern Copper River Basin, Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 325.
- Nichols, D.R., 1989, Pleistocene glacial events, southeastern Copper River Basin, Alaska, in Carter, L.D., Hamilton, T.D., and Galloway, J.P., eds., Late Cenozoic history of the interior basins of Alaska and the Yukon: U.S. Geological Survey Circular 1026, p. 78-80.
- Nichols, D.R., and Watson, J.R., Jr., 1955, Preliminary report on engineering-permafrost studies in the Glennallen area, Alaska [abs.]: Geological Society of America Bulletin, v. 66, no. 12, pt. 2, p. 1706.
- Nichols, D.R., and Yehle, L.A., 1961, Analyses of gas and water from two mineral springs in the Copper River Basin, Alaska, in Short papers in the geologic and hydrologic sciences, 1961: U.S. Geological Survey Professional Paper 424-D, p. D191-D194.
- Nichols, D.R., and Yehle, L.A., 1961, Highway construction and maintenance problems in permafrost regions, in 12th Annual Symposium on Geology as Applied to Highway Engineering, Proceedings: University of Tennessee, Engineering Experimental Station Bulletin 24, p. 19-29.
- Nichols, D.R., and Yehle, L.A., 1961, Mud volcanoes in the Copper River Basin, Alaska, in Raasch, G.O., ed., Geology of the Arctic: Toronto, University of Toronto Press, v. 2, p. 1063-1087.

- Nichols, D.R., and Yehle, L.A., 1969, Engineering geologic map of the southeastern Copper River Basin, Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-524, scale 1:125,000.
- Nichols, D.R., and Yehle, L.A., 1985, Volcanic debris flows, Copper River Basin, Alaska, in Committee for International Exchange of Landslide Technique, eds., Fourth International Conference and Field Workshop on Landslides, Proceedings: Tokyo, The Japan Landslide Society, p. 365-372.
- Nokleberg, W.J., Albert, N.R.D., Bond, G.C., Herzon, P.L., Miyaoka, R.T., Nelson, W.H., Richter, D.H., Smith, T.E., Stout, J.H., Yeend, Warren, and Zehner, R.E., 1982, Geologic map of the southern part of the Mount Hayes quadrangle, Alaska: U.S. Geological Survey Open-File Report 82-52, 1 sheet, scale 1:250,000, 26 p.
- Odum, J.K., Yehle, L.A., Schmoll, H.R., and Gilbert, Chuck, 1986, Description and interpretation of geologic materials from shotholes drilled for the Trans-Alaska Crustal Transect Project, Copper River Basin, Alaska, May 1985: U.S. Geological Survey Open-File Report 86-408, 18 p.
- Olson, E.A., and Broecker, W.A., 1959, Lamont Natural Radiocarbon Measurements: American Journal of Science Radiocarbon Supplement, v. 1, p. 1-28.
- Paige, Sidney, and Knopf, Adolph, 1907, Reconnaissance in the Matanuska and Talkeetna basins, Alaska, with notes on the placers of the adjacent regions: U.S. Geological Survey Bulletin 314-F, p. 104-125.
- Péwé, T.L., 1961, Multiple glaciation in the headwaters area of the Delta River, central Alaska, in Short papers in the geologic and hydrologic sciences 1961: U.S. Geological Survey Professional Paper 424-D, p. D200-D201.
- Péwé, T.L., 1965, Delta River area, Alaska Range, in Schultz, C.B., and Smith, H.T.U., eds., Guidebook for Field Conference F, central and south central Alaska-- International Association for Quaternary Research, 7th Congress, U.S.A., 1965: Lincoln, Nebraska, Nebraska Academy of Sciences, p. 55-93.
- Péwé, T.L., 1968, Loess deposits of Alaska: International Geological Congress, 23rd Session, Prague, 1968, Proceedings, v. 8, p. 297-309.

- Péwé, T.L., 1975, Quaternary geology of Alaska: U.S. Geological Survey Professional Paper 835, 145 p., 1 pl.
- Péwé, T.L., and others, 1953, Multiple glaciation in Alaska, a progress report: U.S. Geological Survey Circular 289, 13 p.
- Péwé, T.L., Ferrians, O.J., Jr., Nichols, D.R., and Karlstrom, T.N.V., 1965, Guidebook for Field Conference F--Central and south-central Alaska, International Association of Quaternary Research, 7th Congress, USA 1965: Lincoln, Nebraska, Nebraska Academy of Science, 141 p.
- Péwé, T.L., and Holmes, G.W., 1964, Geology of the Mt. Hayes D-4 quadrangle, Alaska: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-394, scale 1:63,360.
- Péwé, T.L., and Reger, R.D., 1972, Modern and Wisconsin snowlines in Alaska: International Geological Congress, 24th, Montreal, 1972, proceedings, p. 187-197.
- Péwé, T.L., and Reger, R.D., 1983, Delta River area, Alaska Range, *in* Péwé, T.L., and Reger, R.D., eds., Guidebook to permafrost and Quaternary Geology along the Richardson and Glenn Highways, between Fairbanks and Anchorage, Alaska: Alaska Division of Geological and Geophysical Surveys Guidebook 1, p. 47-135.
- Péwé, T.L., and Reger, R.D., eds., 1983, Richardson and Glenn Highways, Alaska, guidebook to permafrost and Quaternary geology: Alaska Division of Geological and Geophysical Surveys Guidebook 1, 263 p.
- Péwé, T.L., and Reger, R.D., eds., 1989, Quaternary geology and permafrost along the Richardson and Glenn Highways between Fairbanks and Anchorage, Alaska: 28th International Geological Congress, Field Trip Guidebook T102, Washington, D.C., American Geophysical Union, 54 p.
- Péwé, T.L., and Reger, R.D., 1989, Delta River area, Alaska Range, *in* Péwé, T.L., and Reger, R.D., eds., Quaternary geology and permafrost along the Richardson and Glenn Highways between Fairbanks and Anchorage, Alaska: 28th International Geological Congress, Field Trip Guidebook T102, Washington, D.C., American Geophysical Union, p. 25-38.
- Plafker, George, and Mayo, L.R., 1965, Tectonic deformation, subaqueous slides, and destructive waves associated with the Alaskan March 27, 1964 earthquake: An interim geologic evaluation: U.S. Geological Survey Open-File Report 259, 19 p.

- Porter, S.C., Pierce, K.L., and Hamilton, T.D., 1983, Late Wisconsin mountain glaciation in the western United States, in Porter, S.C., ed., Late Quaternary environments of the United States, Volume 1, the late Pleistocene: Minneapolis, University of Minnesota Press, p. 71-111.
- Post, Austin, and Mayo, L.R., 1971, Glacier dammed lakes and outburst floods in Alaska: U.S. Geological Survey Hydrological Investigations Atlas HA-455, scale 1:1,000,000, 3 sheets.
- Reger, R.D., and Bundtzen, T.K., 1990, Multiple glaciation and gold-placer formation, Valdez Creek Valley, western Clearwater Mountains, Alaska: Alaska Division of Geological and Geophysical Surveys Professional Report 107, 29 p.
- Reger, R.D., and Updike, R.G., 1983, Upper Cook Inlet region and the Matanuska valley, in Péwé, T.L., and Reger, R.D., eds., Guidebook to permafrost and Quaternary geology along the Richardson and Glenn Highways, between Fairbanks and Anchorage: Alaska Division of Geological and Geophysical Surveys Guidebook 1, p. 185-263.
- Reitsema, R.H., 1979, Gases of mud volcanoes in the Copper River Basin, Alaska: Geochimica et Cosmochimica Acta, v. 43, no. 2, p. 183-187.
- Richter, D.H., 1966, Geology of the Slana district, southcentral Alaska: Alaska Division of Mines and Minerals, Geologic Report No. 21, 51 p.
- Richter, D.H., 1967, Geology of the upper Slana-Mentasta Pass area, southcentral Alaska: Alaska Division of Mines and Minerals, Geologic Report No. 30, 25 p.
- Richter, D.H., Matson, N.A., Jr., and Schmoll, H.R., 1976, Geologic map of the Nabesna C-4 quadrangle, Alaska: U.S. Geological Survey Geologic Quadrangle Map GQ-1303, scale 1:63,360.
- Richter, D.H., Ratté, J.C., Schmoll, H.R., Leeman, W.P., Smith, J.G., and Yehle, L.A., 1989, Geologic map of the Gulkana B-1 quadrangle, south-central Alaska: U.S. Geological Survey Geologic Quadrangle Map GQ-1655, scale 1:63,360, 1 sheet.
- Richter, D.H., and Schmoll, H.R., 1973, Geologic map of the Nabesna C-5 quadrangle, Alaska: U.S. Geological Survey Geologic Quadrangle Map GQ-1062, scale 1:63,360.

- Richter, D.H., Schmoll, H.R., and Bove, D.J., 1988, Source of the Sanford volcanic debris flow, south-central Alaska, in Galloway, J.P., and Hamilton, T.D., eds., Geologic studies in Alaska by the U.S. Geological Survey during 1987: U.S. Geological Survey Circular 1016, p. 114-116.
- Richter, D.H., Smith, R.L., Yehle, L.A., and Miller, T.P., 1979, Geologic map of the Gulkana A-2 quadrangle, Alaska: U.S. Geological Survey Geologic Quadrangle Map GQ-1520, scale 1:63,360.
- Rose, A.W., 1965, Geology and mineral deposits of the Rainy Creek area, Mt. Hayes quadrangle, Alaska: Alaska Division of Mines and Minerals, Geologic Report No. 14, 50 p.
- Rose, A.W., 1967, Geology of the upper Chistochina River area, Mt. Hayes quadrangle, Alaska: Alaska Division of Mines and Minerals, Geologic Report No. 28, 39 p.
- Rubin, Meyer, and Alexander, Corrine, 1958, U.S. Geological Survey radiocarbon dates IV: Science, v. 129, no. 3313, p. 1476-1487.
- Rubin, Meyer, and Alexander, Corrine, 1960, U.S. Geological Survey radiocarbon dates V: American Journal of Science Radiocarbon Supplement, v. 2, p. 129-185.
- Rubin, Meyer, and Suess, H.E., 1956, U.S. Geological Survey Radiocarbon Dates III: Science, v. 123, no. 3194, p. 442-448.
- Schmoll, H.R., 1961, Orientation of phenoclasts in laminated glaciolacustrine deposits, Copper River Basin, Alaska, in Geological Survey Research 1961: U.S. Geological Survey Professional Paper 424-C, p. C192-C195.
- Schmoll, H.R., 1984, Late Pleistocene morainal and glaciolacustrine geology in the upper Copper River-Mentasta Pass area, Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 332.
- Schrader, F.C., 1900, A reconnaissance of a part of Prince William Sound and the Copper River district, Alaska: U.S. Geological Survey 20th Annual Report, 1898-99, Pt. VII--Exploration in Alaska in 1898, p. 347-423.
- Schrader, F.C., and Spencer, A.C., 1901, The geology and mineral resources of a portion of the Copper River district, Alaska: U.S. Geological Survey Special Publication, 94 p.

- Schweger, C.E., 1981, Chronology of late glacial events from the Tangle Lakes, Alaska Range, Alaska: *Arctic Anthropology*, v. 18, no. 1, p. 97-101.
- Selkregg, L.L., 1974, Alaska regional profiles, southcentral region, Vol. 1: Anchorage, University of Alaska Arctic Environmental Information and Data Center, 255 p.
- Sirkin, L.A., and Tuthill, S.J., 1984, Late Pleistocene vegetation, environments, and deglaciation of the southern Chugach Mountains, Alaska [abs.]: *Geological Society of America Abstracts with Programs*, v. 16, no. 5, p. 333.
- Sirkin, L.A., and Tuthill, S.J., 1987, Late Pleistocene and Holocene deglaciation and environments of the southern Chugach Mountains, Alaska: *Geological Society of America Bulletin*, v. 99, no. 3, p. 376-384.
- Sirkin, L.A., Tuthill, S.J., and Clayton, L.S., 1971, Late Pleistocene history of the lower Copper River valley, Alaska [abs.]: *Geological Society of America Abstracts with Programs*, v. 3, no. 7, p. 708.
- Sloan, C.E., 1976, Water-resources investigations of the Valdez-Delta Junction area, in Cobb, E.H., ed., *The United States Geological Survey in Alaska: accomplishments during 1975*: U.S. Geological Survey Circular 733, p. 47.
- Sloan, C.E., Zenone, Chester, and Mayo, L.R., 1976, Icings along the trans-Alaska pipeline route: U.S. Geological Survey Professional Paper 979, 31 p.
- Stephens, C.D., Fogleman, K.A., Lahr, J.C., Helton, S.M., Cancilla, R.W., Tam, Roy, and Freiberg, J.A., 1980, Catalog of earthquakes in southern Alaska, January-March 1980: U.S. Geological Survey Open-File Report 80-1253, 55 p.
- Stephens, C.D., Lahr, J.C., Fogleman, K.A., Allan, M.A., and Helton, S.M., 1979, Catalog of earthquakes on southern Alaska, January-March 1978: U.S. Geological Survey Open-File Report 79-718, 31 p.
- Stephens, C.D., Lahr, J.C., and Rogers, J.A., 1981, Eastern Gulf of Alaska seismicity: Annual report to the National Oceanic and Atmospheric Administration for April 1, 1980, through March 31, 1981: U.S. Geological Survey Open-File Report 81-897, 32 p.
- Still, P.J., 1980, Index of streamflow and water-quality records to September 30, 1978, south-central Alaska: U.S. Geological Survey Open-File Report 80-600, 54 p.

- Swanson, J.E., 1984, Tazlina River meander loop--A case history, in Elliot, C.M., ed., River meandering: New York, American Society of Civil Engineers, p. 231-239.
- Tarr, R.S., and Martin, Lawrence, 1910, Oscillations of Alaskan glaciers [abs.]: Geological Society of America Bulletin, v. 21, p. 758.
- Tarr, R.S., and Martin, Lawrence, 1913, Glacial deposits of the continental type in Alaska: Journal of Geology, v. 21, p. 289-300.
- Tarr, R.S., and Martin, Lawrence, 1914, Alaskan glacier studies: Washington, D.C., National Geographic Society, 498 p.
- Thorson, R.M., 1984, Pattern and chronology of late Quaternary glaciation, northwest Copper River Basin [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 337.
- Thorson, R.M., Dixon, E.J., Jr., Smith, G.S., and Batten, A.R., 1981, Interstadial Proboscidean from south-central Alaska: Implications for biogeography, geology, and archeology: Quaternary Research, v. 16, no. 3, p. 404-417.
- Trabant, D.C., 1976, Alaska glaciology studies, in Cobb, E.H., ed., The United States Geological Survey in Alaska: Accomplishments during 1975: U.S. Geological Survey Circular 733, p. 45-47.
- Trautman, M.A., 1963, Isotopes, Inc., Radiocarbon Measurements III: Radiocarbon, v. 5, p. 62-79.
- Vogel, J.C., and Waterbolk, H.T., 1972, Groningen radiocarbon dates X: Radiocarbon, v. 14, no. 1, p. 6-110.
- Wade, W.M., Nokleberg, W.J., and Ferrians, O.J., Jr., 1986, Geologic bibliography of the Gulkana quadrangle, Alaska: U.S. Geological Survey Open-File Report 86-332, 16 p.
- Wahrhaftig, Clyde, 1965, Physiographic divisions of Alaska: U.S. Geological Survey Professional Paper 482, 52 p.
- Waller, R.M., 1966, Effects of the March 1964 Alaska earthquake on the hydrology of south-central Alaska: U.S. Geological Survey Professional Paper 544-A, p. A1-A28.

- Waller, R.M., and Selkregg, L.F., 1962, Data on wells and springs along the Glenn Highway (State 1), Alaska: U.S. Geological Survey in cooperation with Alaska Department of Health and Welfare, Basic Data Report, Water-Hydrological Data No. 5, 23 p., 1 plate.
- Walters, J.C., 1983, Sorted patterned ground in ponds and lakes of the High Valley/Tangle Lakes region, central Alaska, in Permafrost, Fourth International Conference, Fairbanks, Alaska, July 17-22, 1983, Proceedings: Washington, D.C., National Academy Press, p. 1350-1355.
- Walters, J.C., 1988, Observations of sorted patterned ground features, High Valley/Tangle Lakes region, central Alaska, USA: Zeitschrift für Geomorphologie, Supplement Band 71, p. 93-106.
- Weber, F.R., 1971, Preliminary engineering geologic maps of the proposed Trans-Alaska Pipeline route, Mt. Hayes quadrangle: U.S. Geological Survey Open-File Report 71-318 (493), scale 1:125,000, 2 sheets.
- Westgate, J.A., 1984, Quaternary tephrochronological studies in central Alaska and the Yukon: Implications for the Copper River Basin [abs.]: Geological Society of America Abstracts with Programs, v. 16, no. 5, p. 339.
- Williams, J.R., 1953, Icings in Alaska, 1949-1950: Engineer Intelligence Division, Office of the Chief of Engineers, U.S. Army, Engineering Notes No. 32, 23 p.
- Williams, J.R., 1970, Ground water in the permafrost regions of Alaska: U.S. Geological Survey Professional Paper 696, 83 p.
- Williams, J.R., 1984, Late Wisconsin glacial retreat and lake levels, western Copper River Basin, Alaska [abs.]: Geological Society of America, Abstracts with Programs, v. 16, no. 5, p. 340.
- Williams, J.R., 1985, Engineering-geologic map of the southwestern Copper River Basin and upper Matanuska River valley, Alaska: U.S. Geological Survey Open-File Report 85-143, scale 1:125,000, 2 sheets.

- Williams, J.R., 1986, New radiocarbon dates from the Matanuska Glacier bog section, in Bartsch-Winkler, Susan, and Reed, K.M., eds., Geologic studies in Alaska by the U.S. Geological Survey during 1985: U.S. Geological Survey Circular 978, p. 85-88.
- Williams, J.R., 1989, A working glacial chronology for the western Copper River Basin, Alaska, in Carter, L.D., Hamilton, T.D., and Galloway, J.P., eds., Late Cenozoic history of the interior basins of Alaska and the Yukon: U.S. Geological Survey Circular 1026, p. 81-84.
- Williams, J.R., and Ferrians, O.J., Jr., 1958, Late Wisconsin and Recent history of the Matanuska Glacier [abs.]: Geological Society of America Bulletin, v. 69, no. 12, pt. 2, p. 1757.
- Williams, J.R., and Ferrians, O.J., Jr., 1961, Late Wisconsin and Recent history of the Matanuska Glacier, Alaska: Arctic, v. 14, no. 2, p. 83-90.
- Williams, J.R., and Galloway, J.P., 1986, Map of western Copper River Basin, Alaska, showing lake sediments and shorelines, glacial moraines, and location of stratigraphic sections and radiocarbon-dated samples: U.S. Geological Survey Open-File Report 86-390, scale 1:250,000, (with text, 30 p.), 1 sheet.
- Williams, J.R., and Johnson, K.M., compilers, 1980, Map and description of late Tertiary and Quaternary deposits, Valdez quadrangle, Alaska: U.S. Geological Survey Open-File Report 80-892C, scale 1:250,000, 2 sheets.
- Williams, J.R., and Johnson, K.M., 1981, Surficial deposits map of the Valdez quadrangle, Alaska, in Albert, N.R.D., and Hudson, Travis, eds., The United States Geological Survey in Alaska: Accomplishments during 1979: U.S. Geological Survey Circular 823-B, p. B76-B78.
- Wilson, F.H., and Young, M.S., 1976, Radiocarbon dates from Alaska, Yukon Territory, and British Columbia: University of Alaska, Fairbanks, Institute of Marine Science IMS Report R76-6, 64 p.
- Wright, H.E., Jr., 1953, Glacial history of the Mentasta Mountains, southeastern Alaska Range [abs.]: Geological Society of America Bulletin, v. 64, pt. 2, p. 1495.
- Yehle, L.A., 1980, Preliminary surficial geologic map of the Valdez C-1 quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-1132, scale 1:63,360.

- Yehle, L.A., and Nichols, D.R., 1980, Reconnaissance map and description of the Chetaslina volcanic debris flow (new name), southeastern Copper River Basin and adjacent areas, south-central Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-1209, scale 1:250,000.
- Yeend, Warren, 1980, Placer gold deposits, Mount Hayes quadrangle, Alaska [abs.]: Geological Society of America Abstracts with Programs, v. 12, p. 161.
- Yeend, Warren, 1981, Placer gold deposits, Mount Hayes quadrangle, Alaska, in Albert, N.R.D., and Hudson, Travis, eds., The United States Geological Survey in Alaska: Accomplishments during 1979: U.S. Geological Survey Circular 823-B, p. B68.
- Yeend, Warren, 1981, Placer gold deposits, Mt. Hayes quadrangle, Alaska, in Silberman, M.L., Field, C.W., and Berry, N.L., eds., Proceedings of Symposium on Mineral Deposits of the Pacific Northwest: U.S. Geological Survey Open-File Report 80-513, 28 p.
- Yeend, Warren, 1984, Placers and placer mining in the Healy quadrangle, southern Alaska, in Coonrad, W.L., and Elliot, R.L., eds., The United States Geological Survey in Alaska: Accomplishments during 1981: U.S. Geological Survey Circular 868, p. 95-99.