

List of Geological Survey
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GEOLOGIC AND WATER SUPPLY REPORTS AND MAPS

MAINE

June 1978

This list contains reports and maps published by the Geological Survey relating to the geology and mineral and water resources of Maine. A separate list of bibliographies and publications of general interest is available on request, as are a general catalog of Geological Survey publications (not including topographic maps) and State indexes to topographic mapping.

Bulletins, professional papers, water-supply papers, and other book reports for which a price is stated, including some that have gone out of print at the Government Printing Office, as indicated by an asterisk (*), are for sale by the BRANCH OF DISTRIBUTION, U.S. GEOLOGICAL SURVEY, 1200 SOUTH EADS STREET, ARLINGTON, VA 22202, and from the U.S. Geological Survey, Public Inquiries Office: General Services Building, Room 1028, 19th and F Streets, NW., Washington, DC 20244 (authorized agent of Superintendent of Documents). Prepayment is required and should be made by check or money order payable to the U.S. Geological Survey. Numerous libraries and educational institutions throughout the country are depositories for this material, and a list of Maine depositories is included.

Maps, folios, hydrologic atlases, and charts are sold by the Geological Survey. They may be purchased over the counter or ordered from the BRANCH OF DISTRIBUTION, U.S. GEOLOGICAL SURVEY, 1200 SOUTH EADS STREET, ARLINGTON, VA 22202. Remittances should be made by check or money order payable to U.S. Geological Survey. A discount of 30 percent is allowed on an order of \$300 or more, based on the retail price. No other discount is applicable. Maps may also be purchased *over the counter* at the U.S. Geological Survey offices where books are sold and at the Survey's Public Inquiries Office: Geological Survey, National Center, Room 1C402, 12201 Sunrise Valley Drive, Reston, Va.

References to geologic information on Maine may be obtained from the following Geological Survey publications: Geologic Map Index of Maine, described herein, and from Bibliographies of North American Geology - Bulletins *746 (1785-1918), *747 (1785-1918), *823 (1919-28), *937 (1929-39), *985 (1950), *1025 (1951), *1035 (1952-53), *1049 (1940-49), *1054 (1954), *1065 (1955), *1075 (1956), *1095 (1957), *1115 (1958), *1145 (1959), *1195 (1950-59) set of 4 volumes, *1196 (1960), *1197 (1961), *1232 (1962), *1233 (1963), *1234 (1964), *1235 (1965), 1266 (1966) \$8.25, *1267 (1967), *1268 (1968), 1269 (1969) \$11.35, and 1370 (1970) \$8.70. Bibliographies and indexes of publications relating to ground water are Water-Supply Papers *992 (1879-1945), *1492 (1946-55), *1863 (1963), and *1864 (1964). A water-resources investigations folder, available free upon request to the Geological Survey, 420 National Center, 12201 Sunrise Valley Drive, Reston, VA 22092, shows the location of stream-gaging stations, observation wells, quality-of-water sample collection sites, areal hydrologic studies, average annual runoff, average discharge of principal streams, and availability of ground water. A brief text lists the hydrologic network, the areal and Statewide projects, and selected references. Additional information is obtainable from the U.S. Geological Survey, 150 Causeway Street, Suite 1001, Boston, MA 02114, and the State Geologist, Maine Geological Survey, State Office Bldg., Augusta, ME 04330.

Information on altitudes in the United States is contained in Bulletins *5, *76, *160, *274, *689, *817, and *1212; information on boundaries and areas of the United States, with historical outlines of boundary changes, is contained in Bulletins *13, *171, *226, *302, *689, *817, and *1212, and Professional Paper 909; information on results of primary triangulation and primary traverse from 1894 to 1918 is contained in Bulletins *122, *181, *216, *245, *276, *310, *440, *496, *551, *644, and *709, and Parts 1 of the *18th, *19th, *20th, and *21st Annual Reports. Further information on more recent triangulation, transit traverse, and spirit leveling in Maine is obtainable upon specific request.

Current publications are announced by means of monthly notices, "New Publications of the Geological Survey." Free on application to the Geological Survey, 329 National Center, 12201 Sunrise Valley Drive, Reston, VA 22092.

ANNUAL REPORTS

- *Third, 1881-82. 1883. Contains: Preliminary paper on the terminal moraine of the second glacial epoch, by T. C. Chamberlin. p. 291-402.
- *Fourth, 1882-83. 1884. Contains: A review of the fossil Ostreidae of North America and a comparison of the fossil with the living forms, by C. A. White. p. 273-430.
- *Sixth, 1884-85. 1885. Contains: Seacoast swamps of the Eastern United States, by N. S. Shaler. p. 353-398.
- *Seventh, 1885-86. 1888. Contains: The rock scorings of the great ice invasions, by T. C. Chamberlin. p. 147-248.
- *Eighth, 1886-87. 1889. Part 2 contains: The geographical distribution of fossil plants, by L. F. Ward. p. 663-960; The geology of the Island of Mount Desert, by N. S. Shaler. p. 967-1061.
- *Twelfth, 1890-91. 1891. Part 1 contains: The North American continent during Cambrian time, by C. D. Walcott. p. 523-568.
- *Thirteenth, 1891-92. 1892. Part 2 contains: The geological history of harbors, by N. S. Shaler. p. 93-209; The average elevation of the United States, by Henry Gannett. p. 283-289.
- *Fourteenth, 1892-93. 1893. Part 2 (1894) contains: Potable waters of Eastern United States, by W. J. McGee. p. 1-47; Natural mineral waters of the United States, by A. C. Peale. p. 49-88.
- *Sixteenth, 1894-95. 1896. Part 1 contains: Principles of North American pre-Cambrian geology, by C. R. Van Hise, with an appendix on flow and fracture of rocks as related to structure, by L. M. Hoskins. p. 571-874.
- *Seventeenth, 1895-96. 1896. Part 1 contains: Magnetic declination in the United States, by Henry Gannett. p. 203-440.
- *Nineteenth, 1897-98. 1898. Part 4 contains: Report of progress of stream measurements for the calendar year 1897, by F. H. Newell, including papers by Dwight Porter, J. B. Lippincott, and others. p. 1-632. Part 5 (1899) contains: The forests of the United States, by Henry Gannett. p. 1-66.
- *Twentieth, 1898-99. Part 4 (1900) contains: Report of progress of stream measurements for the calendar year 1898, by F. H. Newell. p. 1-562.
- *Twenty-first, 1899-1900. 1900. Part 4 (1901) contains: Report of progress of stream measurements for the calendar year 1899, by F. H. Newell. p. 9-488.
- *Twenty-second, 1900-01. 1901. Part 4 (1902) contains: Report of progress of stream measurements for the calendar year 1900, by F. H. Newell. p. 9-506.

(Beginning with the twenty-third (1901-2), the annual reports of the Geological Survey contain no technical papers but were published separately until 1933. Since 1933 a condensed form has been included in the annual report of the Secretary of the Interior. For the fiscal years 1936 to 1963, a limited number of copies of the report as it appeared in the annual report of the Secretary were reprinted separately for official use; copies of these may be had free by persons directly interested, insofar as they are in stock.)

MINERAL RESOURCES OF THE UNITED STATES

The annual volumes of Mineral Resources of the United States contain statistics of production by calendar years and matters relating to technology and resources. Some of the chapters deal with a particular mineral or group of minerals, but much of the information is statistical. These volumes are not listed. The volumes of Mineral Resources were issued by the Geological Survey for the years 1882 to 1923. Reports for 1924 and subsequent years are published by the Bureau of Mines, Washington, DC 20240, as Minerals Yearbooks.

MONOGRAPHS

- *34. The glacial gravels of Maine and their associated deposits, by G. H. Stone. 1899. 499 p.
- *50. The Cretaceous flora of southern New York and New England, by Arthur Hollick. 1906. 219 p.

GEOLOGIC FOLIOS

- *149. Penobscot Bay, Maine, by G. O. Smith, E. S. Bastin, and C. W. Brown. 1907. 14 p., 3 maps.
- *158. Rockland, Maine, by E. S. Bastin. 1908. 15 p., 5 maps.
- *192. Eastport, Maine, by E. S. Bastin and H. S. Williams. 1914. 15 p., 2 sheets of illustrations, 4 maps.

***TOPOGRAPHIC ATLAS OF THE UNITED STATES, FOLIO 1**, Physiographic types, by Henry Gannett. 1898.

PROFESSIONAL PAPERS

- *11. The clays of the United States east of the Mississippi River, by Heinrich Ries. 1903. 298 p.
- *35. The geology of the Perry Basin in southeastern Maine, by G. O. Smith and David White. 1905. 107 p.
- *89. The fauna of the Chapman sandstone of Maine, including descriptions of some related species from the Moose River sandstone, by H. S. Williams, assisted by C. L. Breger. 1916. 347 p.
- *108. Shorter contributions to general geology, 1917. 1918. Contains: The Newington moraine, Maine, New Hampshire, and Massachusetts, by F. J. Katz and Arthur Keith. p. 11-29; Stratigraphy in southwestern Maine and southeastern New Hampshire, by F. J. Katz. p. 165-177.
- *123. A superpower system for the region between Boston and Washington, by W. S. Murray and others. 1921. 261 p.
- *135. The composition of the river and lake waters of the United States, by F. W. Clarke. 1924. 199 p.
- *255. Pegmatite investigations 1942-45, in New England, by E. N. Cameron and others. 1954. 352 p.
- *318. Occurrence of nonpegmatite beryllium in the United States, by L. A. Warner, W. T. Holser, V. R. Wilmarth, and E. N. Cameron. 1959. 198 p.
- *321. Cenozoic echinoids of Eastern United States, by C. W. Cooke. 1959. 106 p.
- *362. Geology and manganese deposits of the Maple and Hovey Mountains area, Aroostook County, Maine, by Louis Pavlides, with a section on Lithology and mineralogy of the deposits, by Louis Pavlides and Charles Milton. 1962 (1963). 116 p.
- 373. Aerial photographs in geologic interpretation and mapping, by R. G. Ray. 1960. 230 p. \$5.25. (Reprint.)
- *400-A. Geological Survey Research 1960, Synopsis of geologic results. 1960. p. A1-A136.
- *400-B. Short papers in the geological sciences, Articles 1-232. 1960. p. B1-B515. Contains the following articles, which are not available separately.
 - 54. Use of aeromagnetic data to determine geologic structure in northern Maine, by J. W. Allingham, p. B117.
 - 56. Mapping conductive strata by electromagnetic methods, by F. C. Frischknecht and E. B. Ekren. p. B121.
 - 57. Electrical properties of sulfide ores in igneous and metamorphic rocks near East Union, Maine, by L. A. Anderson. p. B125.
 - 74. Pre-Silurian stratigraphy in the Shin Pond and Stacyville quadrangles, Maine, by R. B. Neuman. p. B166.
- 211. Structurally localized metamorphism of manganese deposits, Aroostook County, Maine, by Louis Pavlides. p. B463.

PROFESSIONAL PAPERS—Continued

- *424-A. Geological Survey Research 1961, Synopsis of geologic and hydrologic results. 1961. p. A1-A194.
- *424-B. Short papers in the geologic and hydrologic sciences, articles 1-146. 1961. p. B1-B344. Contains the following articles, which are not available separately.
30. Age of the "ribbon rock" of Aroostook County, Maine, by Louis Pavlides, R. B. Neuman, and W. B. N. Berry. p. B65.
117. Molybdenum content of glacial drift related to molybdenite-bearing bedrock, Aroostook County, Maine, by F. C. Canney, F. N. Ward, and M. J. Bright, Jr. p. B276.
- *424-C. Short papers in the geologic and hydrologic sciences, Articles 147-292. 1962. p. C1-C398. Contains the following articles, which are not available separately.
152. Slate from the Greenville quadrangle, Maine, as potential lightweight aggregate material, by G. H. Espenshade and H. P. Hamlin. p. C18.
168. Boundary Mountain anticlinorium, west-central Maine and northern New Hampshire, by A. L. Albee. p. C51.
242. Structure of plutons from gravity measurements, by M. F. Kane. p. C258.
- *424-D. Short papers in the geologic and hydrologic sciences, Articles 293-435. 1961. p. D1-D408. Contains the following articles, which are not available separately.
309. Volcanic rocks of Ordovician age in the Mount Chase ridge, Island Falls quadrangle, Maine, by E. B. Ekren. p. D43.
387. Aeromagnetic interpretation of zoned intrusions in northern Maine, by J. W. Allingham. p. D265.
- *426. Data on uranium and radium in ground water in the United States, 1954 to 1957, by R. C. Scott and F. B. Barker. 1962. 115 p.
- *430. Silurian corals from Maine and Quebec. Includes Silurian corals from the Moose River synclinorium, Maine, by E. C. Stumm; Silurian rugose corals from the Lake Temiscouata area, Quebec, by W. A. Oliver, Jr.; and A new *Kodonophyllum* and associated rugose corals from the Lake Matapedia area, Quebec, by W. A. Oliver, Jr. 1962 (1963). 31 p.
- *450-A. Geological Survey Research 1962, Synopsis of geologic, hydrologic, and topographic results. 1962. p. A1-A257.
- *454-M. Bedrock valleys of the New England coast as related to fluctuations of sea level, by J. E. Upton and C. W. Spencer. 1964. p. M1-M44.
- *475-A. Geological Survey Research 1963, Summary of investigations. p. A1-A300.
- *475-B. Short papers in geology and hydrology, Articles 1-59. 1963. p. B1-B219. Contains the following article, which is not available separately.
30. Caradocian (Middle Ordovician) fossiliferous rocks near Ashland, Maine, by R. E. Neuman. p. B117.
- *475-D. Short papers in geology and hydrology, articles 122-173. 1963. p. D1-D233. Contains the following articles, which are not available separately.
140. Geological and geochemical reconnaissance, southern part of the Smyrna Mills quadrangle, Aroostook County, Maine, by Louis Pavlides and F. C. Canney. p. D96.
153. New occurrences of the rugose coral *Rhizophyllum* in North America, by W. A. Oliver, Jr. p. D149.
- *501-A. Geological Survey Research 1964. 1964. p. A1-A367.
- *501-C. Geological Survey Research 1964. 1964. p. C1-C197. Contains the following article, which is not available separately.
- Outline of the stratigraphic and tectonic features of northeastern Maine, by Louis Pavlides, Ely Mencher, R. S. Naylor, and A. J. Boucot. p. C28.
- *501-D. Geological Survey Research 1964. 1964. p. D1-D208. Contains the following articles, which are not available separately.
- Middle Devonian plant fossils from northern Maine, by J. M. Schopf. p. D43.
- Suggested exploration target in west-central Maine, by F. C. Canney and E. V. Post. p. D61.
- *503-A. Paleozoic Gastropoda from the Moose River synclinorium, northern Maine, by A. J. Boucot and E. L. Yochelson. 1966. p. A1-A20.
- *524-I. Bedrock geology of the Shin Pond and Stacyville quadrangles, Penobscot County, Maine, by R. B. Neuman. 1967. p. I1-I137.
- *525-A. Geological Survey Research 1965. 1965 (1966). p. A1-A376.

PROFESSIONAL PAPERS—Continued

- *525-D. Geological Survey Research 1965. 1965. p. D1-D231. Contains the following article, which is not available separately.
Basins of the Gulf of Maine, by Elazar Uchupi. p. D175.
- *527. Geological-geophysical investigations of bedrock in the Island Falls quadrangle, Aroostook and Penobscot Counties, Maine, by E. B. Ekren and F. C. Frischknecht. 1967. 36 p.
- *530. The geologic occurrence of monazite, by W. C. Overstreet. 1967. 327 p.
- *538. Geology of epigenetic uranium deposits in sandstone in the United States, by W. I. Finch. 1967. 121 p.
- *544-C. Hydrologic effects of the earthquake of March 27, 1964, outside Alaska, by R. C. Vorhis, E. E. Rexin, and R. W. Coble. 1967. p. C1-C54.
- *550-A. Geological Survey Research 1966. 1966 (1967). p. A1-A385.
- *550-B. Geological Survey Research 1966. 1966. p. B1-B277. Contains the following articles, which are not available separately.
Graptolite-bearing Silurian rocks of the Houlton-Smyrna Mills area, Aroostook County, Maine, by Louis Pavlides and W. B. N. Berry. p. B51.
Distribution and geologic structure of Triassic rocks in the Bay of Fundy and the northeastern part of the Gulf of Maine, by A. R. Tagg and Elazar Uchupi. p. B95.
- *550-D. Geological Survey Research 1966. 1966. p. D1-D267. Contains the following article, which is not available separately.
Erect plants in the Early Silurian of Maine, by J. M. Schopf, Ely Mencher, A. J. Boucot, and H. N. Andrews. p. D69.
- *558. The Ore Knob copper deposit, North Carolina, and other massive sulfide deposits of the Appalachians, by A. R. Kinkel, Jr. 1967. 58 p.
- *575-A. Geological Survey Research 1967. 1967. p. A1-A377.
- *575-C. Geological Survey Research 1967. 1967. p. C1-C251. Contains the following article, which is not available separately.
Heavy-mineral assemblages in the nearshore surface sediments of the Gulf of Maine, by D. A. Ross. p. C77.
- *575-D. Geological Survey Research 1967. 1967. p. D1-D297. Contains the following article, which is not available separately.
Fossiliferous lower Paleozoic rocks in the Cupsuptic quadrangle, west-central Maine, by D. S. Harwood and W. B. N. Berry. p. D16.
- *600-A. Geological Survey Research 1968. 1968. p. A1-A371.
628. The tectonics of North America—A discussion to accompany the Tectonic Map of North America scale 1:5,000,000, by P. B. King. 1969. 94 p. \$3. (Reprint.)
- *650-A. Geological Survey Research 1969. 1969 (1970). p. A1-A415. \$7.55.
- *650-D. Geological Survey Research 1969. 1969. p. D1-D299. Contains the following article, which is not available separately.
The Second Lake anticline—A major structure on the northwest limb of the Boundary Mountain anticlinorium, northern New Hampshire, west-central Maine, and adjacent Quebec, by D. S. Harwood. p. D106.
- *700-A. Geological Survey Research 1970. 1970 (1971). p. A1-A426.
- *700-B. Geological Survey Research 1970. 1970. p. B1-B267. \$7.45. Contains the following article, which is not available separately.
The glaciated shelf off northeastern United States, by R. N. Oldale and Elazar Uchupi. p. B167.
710. Jasperoid in the United States—its characteristics, origin, and economic significance, by T. G. Lovering. 1972. 164 p. \$3.75. (Reprint.)
- *726-B. Gravity and magnetic evidence of lithology and structure in the Gulf of Maine region, by M. F. Kane, M. J. Yellin, K. G. Bell, and Isidore Zietz. 1972. p. B1-B22. \$2.85.
- *750-A. Geological Survey Research 1971. 1971 (1972). p. A1-A418. \$5.95.
- *757. Sedimentary framework of the western Gulf of Maine and the southeastern Massachusetts offshore area, by R. N. Oldale, Elazar Uchupi, and K. E. Prada. 1973. 10 p. \$2.60.
784. Early Paleozoic brachiopods of the Moose River synclinorium, Maine, by A. J. Boucot. 1973. 81 p. \$3.20.
- *800-A. Geological Survey Research 1972. 1972 (1973). p. A1-A320.

PROFESSIONAL PAPERS—Continued

- *800-B. Geological Survey Research 1972. 1972. p. B1-B281. \$5.10. Contains the following article, which is not available separately.
Some genetic implications of the phase composition of a simple New England pegmatite, by R. O. Castle and T. G. Theodore. p. B105.
820. United States mineral resources D. A. Brobst and W. P. Pratt, editors. 1973. 722 p. \$14.35.
850. Geological Survey Research 1973. 1973 (1974). 366 p. \$5.30.
853. Paleotectonic investigations of the Pennsylvanian System in the United States, by E. D. McKee, E. J. Crosby, and others. 1975 (1976). Pt. I, Introduction and regional analyses of the Pennsylvanian System, 349 p.; Pt. II, Interpretive summary and special features of the Pennsylvanian System, 192 p.; Pt. III, 17 plates in pocket. \$41 per set.
874. North American species of *Tempskya* and their stratigraphic significance, by S. R. Ash and C. B. Read, *with a section on* Stratigraphy and age of the *Tempskya*-bearing rocks of southern Hidalgo County, N. Mex., by R. A. Zeller, Jr. 1976. 42 p.; 13 plates showing fossils. \$2.05.
900. Geological Survey Research 1974. 1974 (1975). 349 p. \$6.10
902. Precambrian geology of the United States: An explanatory text to accompany the Geologic Map of the United States, by P. B. King. 1976 (1977). 85 p. \$2. (Reprint.)
903. The Paleozoic and Mesozoic rocks; a discussion to accompany the Geologic Map of the United States, by P. B. King and H. M. Beikman. 1976. 76 p. \$1.90.
904. The Cenozoic rocks; a discussion to accompany the Geologic Map of the United States, by P. B. King and H. M. Beikman. 1978. 82 p. \$2.75.
909. Boundaries of the United States and the several States, by F. K. Van Zandt. 1975. 191 p. \$5.20.
933. Geology and resources of fluorine in the United States, edited by D. R. Shawe, *with sections by* D. R. Shawe, R. E. Van Alstine, R. G. Worl, A. V. Heyl, R. D. Trace, R. L. Parker, W. R. Griffiths, C. L. Sainsbury, and J. B. Cathcart. 1976. 99 p.; 28 figs. \$2.20.
940. Mineral Resource Perspectives 1975. 1976. 24 p. \$1.20.
950. Nature to be commanded . . . , by G. D. Robinson and A. M. Spieker, editors. 1978. 95 p. \$6.25.
957. Lead in the environment, T. G. Lovering, editor. 1976. 90 p. \$2.10.
- *959 A-F. Geology and resources of titanium. A, Titanium contents and titanium partitioning in rocks, by E. R. Force; B, Metamorphic source rocks of titanium placer deposits—A geochemical cycle, by E. R. Force; C, Rutile and sphene in blueschist and related high-pressure facies rocks, by M. C. Blake, Jr., and B. A. Morgan; D, Titanium deposits in anorthosite massifs, by Norman Herz; E, Titanium deposits in alkalic igneous rocks, by Norman Herz; and F, Titanium minerals in deposits of other minerals, by E. R. Force. p. A1-A10; B1-B16; C1-C6; D1-D6; E1-E6; F1-F5. (Contributions to geology of titanium.)
964. A land use and land cover classification system for use with remote sensor data, by J. R. Anderson, E. E. Hardy, J. T. Roach, and R. E. Witmer. 1976. 28 p. 75¢. (Reprint.)
975. Geological Survey Research 1975. 1975 (1976). 373 p. \$5.
978. PACER—Data entry, retrieval, and update for the National Coal Resources Data System (Phase I), by S. M. Cargill, A. C. Olson, A. L. Medlin, and M. D. Carter. 1976. 107 p. \$2.20.
1000. Geological Survey Research 1976. 1976 (1977). 414 p. \$5.50.
- 1006-A,B. Demand and supply of nonfuel minerals and materials for the United States energy industry, 1975-90—A preliminary report. A, Demand for nonfuel minerals and materials by the United States energy industry, 1975-90, by J. P. Albers, W. J. Bawiec, and L. F. Rooney. p. A1-A19. B, Supply of nonfuel minerals and materials for the United States energy industry, 1975-90, by G. H. Goudarzi, L. F. Rooney, and G. L. Shaffer. p. B1-B37. 1976. \$1.70. (Reprint.)
1015. Proceedings of the first annual William Pecora Memorial Symposium, October 1975, Sioux Falls, South Dakota, by P. W. Woll and W. A. Fischer, editors. 1977. 370 p. \$6.50.
1050. Geological Survey Research 1977. 1977 (1978). 411 p. \$6.

BULLETINS

- *27. Report of work done in the division of chemistry and physics, mainly during the fiscal year 1884-85. 1886. Contains: Topaz from Stoneham, Maine, by F. W. Clarke. p. 9-15.
- *32. Lists and analyses of the mineral springs of the United States (a preliminary study), by A. C. Peale. 1886. 235 p.
- *42. Report of work done in the division of chemistry and physics, mainly during the fiscal year 1885-86. Contains: Researches on the lithia micas, by F. W. Clarke. p. 11-27; The minerals of Litchfield, Maine, by F. Clarke. p. 28-38.
- *80. Correlation papers: Devonian and Carboniferous, by H. S. Williams. 1891. 279 p.
- *81. Correlation papers: Cambrian, by C. D. Walcott. 1891. 447 p.
- *84. Correlation papers: Neocene, by W. H. Dall and G. D. Harris. 1892. 349 p.
- *86. Correlation papers: Archean and Algonkian, by C. R. Van Hise. 1892. 549 p.
- *87. A synopsis of American fossil Brachiopoda, including bibliography and synonymy, by Charles Schuchert. 1897. 464 p.
- *123. A dictionary of geographic positions in the United States, compiled by Henry Gannett. 1895. 183 p.
- *165. Contributions to the geology of Maine, by H. S. Williams and H. E. Gregory. 1900. 212 p. Contains: Part 1, The Paleozoic faunas of Maine, by H. S. Williams. p. 15-92; Part 2, Geology of the Aroostook volcanic area, including an account of the clastic rocks of Aroostook county, by H. E. Gregory. p. 93-188; Part 3, List of localities of Paleozoic, igneous, and other crystalline rocks examined during the seasons of 1897 and 1898, by H. S. Williams. p. 189-203.
- *185. Results of spirit leveling, 1900-1901, by H. M. Wilson and others. 1901. 219 p.
- *225. Contributions to economic geology, 1903. 1904. Contains: Quartz veins in Maine and Vermont, by G. O. Smith. p. 81-88.
- *243. Cement materials and industry of the United States, by E. C. Eckel. 1905. 395 p. (See Bulletin 522.)
- *258. The origin of certain place names in the United States, by Henry Gannett. 1905. 334 p.
- *260. Contributions to economic geology, 1904. 1905. Contains: A molybdenite deposit in eastern Maine, by G. O. Smith. p. 197-199; Limonite deposits of eastern New York and western New England, by E. C. Eckel. p. 335-342; The granite industry of the Penobscot Bay quadrangle, Maine, by G. O. Smith. p. 489-492.
- *269. Corundum and its occurrence and distribution in the United States, by J. H. Pratt. 1906. 175 p.
- *275. Slate deposits and slate industry of the United States, by T. N. Dale, with sections by E. C. Eckel, W. F. Hillebrand, and A. T. Coons. 1906. 154 p. (See Bulletin 586).
- *285. Contributions to economic geology, 1905. 1906. Contains: The lime industry of Knox County, Maine, by E. S. Bastin. p. 393-400; Clays of the Penobscot Bay region, Maine, by E. S. Bastin. p. 428-431; Note on a new variety of Maine slate, by T. N. Dale. p. 449-450; Graphite in Maine, by G. O. Smith. p. 480-483.
- *313. The granites of Maine, by T. N. Dale, with an introduction by G. O. Smith. 1907. 202 p. (See Bulletin 738.)
- *315. Contributions to economic geology, 1906, Part 1. 1907. Contains: Note on a mineral-deposit prospect near Ayers Junction, West Pembroke, Maine, by G. O. Smith. p. 118-119; Recent work on New England granites, by T. N. Dale. p. 356-359; Feldspar and quartz deposits of Maine, by E. S. Bastin. p. 383-393.
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1936	*817		1943	*986		1950	*1165		1958-62	*1782	
1937	*840		1944	*1016		1951	*1191		1963-67	*1977	
1938	*845		1945	*1023		1952	*1221		1968-72	*2140	
1939	*886		1946	*1071		1953	*1265				
1940	*906		1947	*1096		1954	*1321				
1941	*936		1948	*1126		1955	*1404				
Information of the quality of the surface water											
1953	*1290		1958	*1571		1963	*1947		1968	*2091	
1954	*1350		1959	*1641		1964	*1954		1969	*2141	
1955	*1400		1960	*1741		1965	*1961		1970	2151	\$5.55
1956	*1450		1961	*1881		1966	*1991				
1957	*1520		1962	*1941		1967	*2011				
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1898	*27		1916	*431		1935	*781		1953	*1271	
1899	*35		1917	*451		1936	*801		1954	*1331	
1900	*47		1918	*471		1937	*821		1955	*1381	
1901	*65		1919-20	*501		1938	*851		1956	*1431	
	*75		1921	*521		1939	*871		1957	*1501	
1902	*82		1922	*541		1940	*891		1958	*1551	
1903	*97		1923	*561		1941	*921		1959	*1621	
1904	*124		1924	*581		1942	*951		1960	*1701	
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725. Geological estimates of undiscovered recoverable oil and gas resources in the United States, by B. M. Miller, H. L. Thomsen, G. L. Dolton, A. B. Coury, T. A. Hendricks, F. E. Lennartz, R. B. Powers, E. G. Sable, and K. L. Varnes. 1975. 78 p. (Reprint.)

CIRCULARS—Continued

726. Assessment of geothermal resources of the United States—1975, by D. E. White and D. L. Williams, editors. 1975. 155 p. (Reprinted 1976.)
729. Earthquake prediction—opportunity to avert disaster. 1976. 35 p. (A conference on earthquake warning and response held in San Francisco, California, on November 7, 1975.) (Reprint.)
731. A guide to State programs for the reclamation of surface mined areas, by E. A. Imhoff, T. O. Friz, and J. R. LaFevors. 1976. 33 p.
- 736-A. Seismic engineering program report, January-March 1976. 1976. 17 p.
- 736-B. Seismic engineering program report, April-June 1976. 1976. 12 p.
- 736-C. Seismic engineering program report, July-September 1976. 1976 (1977). 14 p.
- 736-D. Seismic engineering program report, October-December 1976. 1977. 23 p.
742. Bibliography and index of U.S. Geological Survey publications relating to coal, 1971-1975, by F. K. Walker. 1976. 32 p. (Supersedes Circular 709 and is a supplement to Bulletin 1377.)
744. Research by the U.S. Geological Survey on organic materials in water, by R. A. Baker. 1976 (1977). 6 p.
745. Water consumption by nuclear powerplants and some hydrological implications, by E. V. Giusti and E. L. Meyer. 1977. 14 p.
- 749-A. Earthquakes in the United States, January-March 1975, by R. B. Simon, C. W. Stover, and W. J. Person. 1977. p. A1-A35.
- 749-B. Earthquakes in the United States, April-June 1975, by W. J. Person, R. B. Simon, and C. W. Stover. 1977. p. B1-B27.
- 749-C. Earthquakes in the United States, July-September 1975, by C. W. Stover, R. B. Simon, W. J. Person, and J. H. Minsch. 1977. p. C1-C29.
- 749-D. Earthquakes in the United States, October-December 1975, by J. H. Minsch, C. W. Stover, W. J. Person, and R. B. Simon. 1977. p. D1-D27.
757. Coal geology and the future—symposium abstracts and selected references, edited by C. R. Meissner, Jr., C. B. Cecil, and G. D. Stricker. 1977. 20 p.
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- 762-A. Seismic engineering program report, January-April 1977. 1977. 28 p.
763. Progress report on selected geophysical activities of the United States, 1973-76—A quadrennium of cooperation and progress, edited by J. N. Jordan and K. L. Svendsen. 1977. 37 p.
765. Estimated use of water in the United States in 1975, by C. R. Murray and E. B. Reeves. 1977. 39 p.
- 766-A. Earthquakes in the United States, January-March 1976, by R. B. Simon, C. W. Stover, W. J. Person, and J. H. Minsch. 1978. p. A1-A33.
- 766-B. Earthquakes in the United States, April-June 1976, by R. B. Simon, C. W. Stover, W. J. Person, and J. H. Minsch. 1977. 27 p.
777. A guide to obtaining information from the USGS 1978, compiled by P. F. Clarke, H. E. Hodgson, and G. W. North. 1978. 36 p.
780. Earthquake Hazards Reduction Program—fiscal year 1978 studies supported by the U.S. Geological Survey, by R. M. Hamilton. 1978. 36 p.

MAPS, CHARTS, AND ATLASES

(See ordering instructions on p. 1.)

***ACADIA NATIONAL PARK**, Maine. 1931. Scale 1:62,500. Geologic text by G. M. Wood.

***ACADIA NATIONAL PARK AND VICINITY**, Maine. 1942. Scale 1:31,680. Geologic text by G. M. Wood.

ACADIA NATIONAL PARK AND VICINITY, Maine (topographic). 1971. This map shows Acadia National Park and adjacent area. Limiting parallels are 44°12'30" and 44°27'30". Limiting meridians are 68°05' and 68°27'30". Scale 1:50,000 (1 inch = about 4,200 feet.) Contour interval 20 feet (6 m). Sheet 27 by 29 inches. \$2.

COAL FIELDS OF THE UNITED STATES (excluding Alaska and Hawaii). Sheet 1, by James Trumbull. 1959 (1960). Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 37 by 52 inches. \$2.25. (Reprinted 1977.)

GEOLOGIC MAP INDEX OF MAINE, by W. L. McIntosh and M. F. Eister. 1970. Shows by colored outlines the areas in Maine for which geologic maps have been published and indicates the approximate scale of each map. A text printed on the margin of the same sheet gives the scale, date, author, and source of publication of each map. Scale 1:1,000,000. 1 sheet. 50¢.

GEOLOGIC MAP OF THE UNITED STATES (exclusive of Alaska and Hawaii), by P. B. King and H. M. Beikman. 1974 (1975). 3 sheets. \$5.

GEOHERMAL GRADIENT MAP OF NORTH AMERICA, by the Geothermal Survey of North America Subcommittee of the American Association of Petroleum Geologists' Research Committee. 1976. Scale 1:5,000,000. Two sheets. \$4 per set.

SUBSURFACE TEMPERATURE MAP OF NORTH AMERICA, by the Geothermal Survey of North America Subcommittee of the American Association of Petroleum Geologists' Research Committee. 1976. Scale 1:5,000,000. Two sheets. \$4 per set.

UNITED STATES GEOLOGICAL SURVEY YEARBOOK, fiscal year 1977. 1978. 229 p. \$4.75.

GEOLOGIC QUADRANGLE MAPS

GQ-120. Poland, Maine. Surficial geology, by J. B. Hanley. 1959. Lat 44° to 44°15', long 70°15' to 70°30'. Scale 1:62,500. \$1.75.

GQ-221. Bedrock geology of the Danforth quadrangle, Maine, by D. M. Larrabee and C. W. Spencer. 1963. Lat 45°30' to 45°45', long 67°45' to 68°. Scale 1:62,500. \$1.75.

GQ-330. Geology of the Greenville quadrangle, Maine, by G. H. Espenshade and E. L. Bou-dette. 1964. Lat 45°15' to 45°30', long 69°30' to 69°45'. Scale 1:62,500. \$1.75.

GQ-358. Bedrock geologic map of the Big Lake quadrangle, Washington County, Maine, by D. M. Larrabee. 1964. Lat 45° to 45°15', long 67°30' to 67°45'. Scale 1:62,500. \$1.75.

GQ-920. Geologic map of the Houlton quadrangle, Aroostook County, Maine, by Louis Pavlides. 1971. Lat 46° to 46°15', long 67°45' to 68°. Scale 1:62,500. \$1.75.

GQ-1024. Geologic map of the Smyrna Mills quadrangle, Aroostook County, Maine, by Louis Pavlides. 1972. Lat 46° to 46°15', long 68° to 68°15'. Scale 1:62,500. Accompanied by 7-page text. \$1.75.

GQ-1094. Geologic map of the Howe Brook quadrangle, Aroostook County, Maine, by Louis Pavlides. 1973. Lat 46°15' to 46°30', long 68° to 68°15'. Scale 1:62,500. \$1.75.

GQ-1272. Geologic map of the Rumford quadrangle, Oxford and Franklin Counties, Maine, by R. H. Moench and C. T. Hildreth. 1976. Lat 44°30' to 44°45', long 70°30' to 70°45'. Scale 1:62,500. \$1.75. (Supersedes Open-file report 74-358.)

GEOPHYSICAL INVESTIGATIONS MAPS

GP-116. Aeromagnetic survey and geologic reconnaissance of part of Piscataquis County, Maine, by J. R. Balsley, Jr., and E. P. Kaiser. 1954. Scale 1:62,500. \$1.50.

GP-137. Aeromagnetic map of the Berwick quadrangle, Maine and New Hampshire, by R. W. Bromery, G. L. Zandle, and others. 1956. Lat 43°15' to 43°30', long 70°45' to 71°. Scale 1:62,500. \$1.25.

GP-154. Aeromagnetic map of the Jo-Mary Mountain area, Piscataquis and Penobscot Counties, Maine, by J. R. Balsley, Jean Blanchett, J. R. Kirby, and others. 1957. Lat 45°30' to 45°50', long 68°50' to 69°07'. Scale 1:62,500. \$1.25.

GP-155. Aeromagnetic map of the Harrington Lake quadrangle, Piscataquis County, Maine, by J. R. Balsley, Jean Blanchett, J. R. Kirby, and others. 1957. Lat 45°45' to 46°, long 69° to 69°15'. Scale 1:62,500. \$1.25.

GP-288. Aeromagnetic map of the Grand Lake Sebouis quadrangle, Aroostook and Penobscot Counties, Maine, by R. W. Bromery. 1962. Lat 46°15' to 46°30', long 68°30' to 68°45'. Scale 1:62,500. \$1.25.

GEOPHYSICAL INVESTIGATIONS MAPS—Continued

- GP-289. Aeromagnetic map of the Oxbow quadrangle, Aroostook and Penobscot Counties, Maine, by J. R. Balsley. 1962. Lat $46^{\circ}15'$ to $46^{\circ}30'$, long $68^{\circ}15'$ to $68^{\circ}30'$. Scale 1:62,500. \$1.25.
- GP-290. Aeromagnetic map of the Howe Brook quadrangle, Aroostook County, Maine, by J. R. Balsley. 1962. Lat $46^{\circ}15'$ to $46^{\circ}30'$, long 68° to $68^{\circ}15'$. Scale 1:62,500. \$1.25.
- GP-291. Aeromagnetic map of the Bridgewater quadrangle, Aroostook County, Maine, by J. R. Henderson, Jr. 1962. Lat $46^{\circ}15'$ to $46^{\circ}30'$, long $67^{\circ}45'$ to 68° . Scale 1:62,500. \$1.25.
- X GP-292. Aeromagnetic map of part of the Shin Pond quadrangle, Penobscot County, Maine, by R. W. Bromery. 1962. Lat 46° to $46^{\circ}15'$, long $68^{\circ}30'$ to $68^{\circ}45'$. Scale 1:62,500. \$1.25.
- GP-293. Aeromagnetic map of the Island Falls quadrangle, Aroostook and Penobscot Counties, Maine, by W. J. Dempsey. 1962. Lat 46° to $46^{\circ}15'$, long $68^{\circ}15'$ to $68^{\circ}30'$. Scale 1:62,500. \$1.25.
- GP-294. Aeromagnetic map of the Smyrna Mills quadrangle, Aroostook County, Maine, by W. J. Dempsey. 1962. Lat 46° to $46^{\circ}15'$, long 68° to $68^{\circ}15'$. Scale 1:62,500. \$1.25.
- GP-295. Aeromagnetic map of the Houlton quadrangle, Aroostook County, Maine, by W. J. Dempsey. 1962. Lat 46° to $46^{\circ}15'$, long $67^{\circ}45'$ to 68° . Scale 1:62,500. \$1.25.
- GP-310. Aeromagnetic map of the Skinner and parts of the Attean and Sandy Bay quadrangles, Somerset and Franklin Counties, Maine, by R. W. Bromery and F. P. Gilbert. 1962. Lat $45^{\circ}30'$ to 46° , long $70^{\circ}15'$ to $70^{\circ}45'$. Scale 1:62,500. \$1.25.
- GP-312. Geologic and aeromagnetic map of northern Maine, by A. J. Boucot, Andrew Griscom, and J. W. Allingham. 1964. Lat 45° to 47° , long 68° to $71^{\circ}15'$. Scale 1:250,000. \$1.50.
- GP-330. Aeromagnetic map of the Chain Lakes quadrangle, Franklin and Somerset Counties, Maine, by J. R. Henderson, F. P. Gilbert, and others. 1963. Lat $45^{\circ}15'$ to $45^{\circ}30'$, long $70^{\circ}30'$ to $70^{\circ}45'$. Scale 1:62,500. \$1.25.
- GP-331. Aeromagnetic map of the Spencer Lake quadrangle, Franklin and Somerset Counties, Maine, by R. W. Bromery, Harry Soday, and others. 1963. Lat $45^{\circ}15'$ to $45^{\circ}30'$, long $70^{\circ}15'$ to $70^{\circ}30'$. Scale 1:62,500. \$1.25.
- GP-332. Aeromagnetic map of the Kennebec Lake quadrangle, Franklin County, Maine, by J. R. Henderson, F. P. Gilbert, and others. 1963. Lat 45° to $45^{\circ}15'$, long $70^{\circ}30'$ to $70^{\circ}45'$. Scale 1:62,500. \$1.25.
- GP-333. Aeromagnetic map of the Stratton quadrangle, Franklin and Somerset Counties, Maine, by R. W. Bromery, N. S. Tyson, and others. 1963. Lat 45° to $45^{\circ}15'$, long $70^{\circ}15'$ to $70^{\circ}30'$. Scale 1:62,500. \$1.25.
- GP-334. Aeromagnetic map of the Moosehead Lake quadrangle and part of the First Roach Pond quadrangle, Piscataquis and Somerset Counties, Maine, by J. R. Henderson, C. W. Smith, and others. 1963. Lat $45^{\circ}30'$ to $45^{\circ}45'$, long $69^{\circ}25'$ to $69^{\circ}45'$. Scale 1:62,500. \$1.25.
- GP-335. Aeromagnetic map of the Greenville quadrangle and part of the Sebec Lake quadrangle, Piscataquis and Somerset Counties, Maine, by R. W. Bromery, J. L. Vargo, and others. 1963. Lat $45^{\circ}45'$ to $45^{\circ}30'$, long $69^{\circ}15'$ to $69^{\circ}25'$. Scale 1:62,500. \$1.25.
- GP-336. Aeromagnetic map of the Stacyville quadrangle and part of the Katahdin quadrangle, Penobscot and Piscataquis Counties, Maine, by R. W. Bromery, Carl Long and others. 1963. Lat $45^{\circ}45'$ to 46° , long $68^{\circ}30'$ to $68^{\circ}52'30''$. Scale 1:62,500. \$1.25.
- GP-358. Aeroradioactivity map of parts of east-central New York and west-central New England, by Peter Popenoe. 1964. Lat about 42° to $43^{\circ}30'$, long about $71^{\circ}30'$ to $74^{\circ}30'$. Scale 1:250,000. \$1.25.
- GP-371. Aeromagnetic map of part of the Fish River Lake quadrangle, Aroostook County, Maine, by L. A. Anderson, N. W. Natof, and others. 1963. Lat $46^{\circ}45'$ to $46^{\circ}55'$, long $68^{\circ}45'$ to 69° . Scale 1:62,500. \$1.25.
- GP-372. Aeromagnetic map of part of the Winterville quadrangle, Aroostook County, Maine, by L. A. Anderson, N. W. Natof, and others. 1963. Lat $46^{\circ}45'$ to 47° , long $68^{\circ}30'$ to $68^{\circ}45'$. Scale 1:62,500. \$1.25.
- GP-373. Aeromagnetic map of part of the Mooseleuk Lake quadrangle, Aroostook and Piscataquis Counties, Maine, by L. A. Anderson, N. W. Natof, and others. 1963. Lat $46^{\circ}30'$ to $46^{\circ}45'$, long $68^{\circ}45'$ to 69° . Scale 1:62,500. \$1.25.

GEOPHYSICAL INVESTIGATIONS MAPS—Continued

- GP-374. Aeromagnetic map of part of the Greenlaw quadrangle, Aroostook County, Maine, by L. A. Anderson, N. W. Natof, and others. 1963. Lat 46°30' to 46°45', long 68°30' to 68°45'. Scale 1:62,500. \$1.25.
- GP-375. Aeromagnetic map of part of the Churchill Lake quadrangle, Piscataquis County, Maine, by R. W. Bromery, E. F. McGowan, and others. 1963. Lat 46°15' to 46°30', long 69°15' to 69°30'. Scale 1:62,500. \$1.25.
- GP-376. Aeromagnetic map of the Spider Lake quadrangle and part of Musquacook Lakes quadrangle, Piscataquis and Aroostook Counties, Maine, by L. A. Anderson, R. W. Bromery, and N. S. Tyson. 1963. Lat 46°15' to 46°40', long 69° to 69°15'. Scale 1:62,500. \$1.25.
- GP-377. Aeromagnetic map of the Millinocket Lake quadrangle, Aroostook, Piscataquis and Penobscot Counties, Maine, by L. A. Anderson, R. W. Bromery, and E. F. McGowan. 1963. Lat 46°15' to 46°30', long 68°45' to 69°. Scale 1:62,500. \$1.25.
- GP-378. Aeromagnetic map of part of the Caucomgomoc Lake quadrangle, Somerset and Piscataquis Counties, Maine, by R. W. Bromery, N. S. Tyson, and others. 1963. Lat 46° to 46°15', long 69°30' to 69°45'. Scale 1:62,500. \$1.25.
- GP-379. Aeromagnetic map of the Chesuncook quadrangle, Piscataquis County, Maine, by R. W. Bromery, E. F. McGowan, and others. 1963. Lat 46° to 46°15', long 69°15' to 69°30'. Scale 1:62,500. \$1.25.
- GP-380. Aeromagnetic map of the Telos Lake quadrangle, Piscataquis County, Maine, by R. W. Bromery, E. F. McGowan, and others. 1963. Lat 46° to 46°15', long 68° to 69°15'. Scale 1:62,500. \$1.25.
- GP-381. Aeromagnetic map of the Traveler Mountain quadrangle, Piscataquis and Penobscot Counties, Maine, by R. W. Bromery, N. S. Tyson, and others. 1963. Lat 46° to 46°15', long 68°45' to 69°. Scale 1:62,500. \$1.25.
- GP-423. Aeromagnetic interpretation and preliminary geology of the Danforth area, Maine, by Andrew Griscom and D. M. Larrabee. 1963. Lat 45°30' to 45°40', long 67°25' to 68°15'. Scale 1:62,500. \$1.25.
- GP-477. Aeromagnetic map of the Cupsuptic quadrangle, Oxford and Franklin Counties, Maine, by G. R. Boynton and F. P. Gilbert. 1964. Lat 45° to 45°15', long 70°45' to 71°. Scale 1:62,500. \$1.25.
- GP-478. Aeromagnetic map of the Oquosoc quadrangle, Oxford and Franklin Counties, Maine, by G. R. Boynton and F. P. Gilbert. 1964. Lat 44°45' to 45°, long 70°45' to 71°. Scale 1:62,500. \$1.25.
- GP-479. Aeromagnetic map of the Phillips quadrangle, Franklin County, Maine, by G. R. Boynton and F. P. Gilbert. 1964. Lat 44°45' to 45°, long 70°15' to 70°30'. Scale 1:62,500. \$1.25.
- GP-480. Aeromagnetic map of the Rangeley quadrangle and part of the Kennebago Lake quadrangle, Franklin and Oxford Counties, Maine, by G. R. Boynton and F. P. Gilbert. 1964. Lat 44°45' to 45°01', long 70°30' to 70°45'. Scale 1:62,500. \$1.25.
- GP-485. Aeromagnetic map of the Forks quadrangle, Piscataquis and Somerset Counties, Maine, by R. W. Bromery and N. W. Natof. 1964. Lat 45°15' to 45°30', long 69°45' to 70°. Scale 1:62,500. \$1.25.
- GP-486. Aeromagnetic map of the Old Speck Mountain quadrangle, Franklin and Oxford Counties, Maine, by J. R. Henderson and C. W. Smith. 1964. Lat 44°30' to 44°45', long 70°45' to 71°. Scale 1:62,500. \$1.25.
- GP-487. Aeromagnetic map of the Amity quadrangle, Aroostook County, Maine, by J. L. Meuschke and J. L. Vargo. 1964. Lat 45°45' to 46°, long 67°45' to 68°. Scale 1:62,500. \$1.25.
- GP-499. Aeromagnetic and generalized geologic map of the Bingham quadrangle, Somerset County, Maine, by R. E. Mattick. 1965. Lat 45° to 45°15', long 69°45' to 70°. Scale 1:62,500. \$1.25.
- GP-580. Simple Bouguer gravity map of Maine, by M. F. Kane and R. W. Bromery. 1966. Scale 1:500,000. \$1.25.
- GP-839. Bouguer gravity and generalized geologic map of New England and adjoining areas, by M. F. Kane, Gene Simmons, W. H. Diment, M. M. Fitzpatrick, W. B. Joyner, and R. W. Bromery. 1972. Lat 41° to 47°, long 67° to 76°. Scale 1:1,000,000. Accompanied by 6-page text. \$1.25.
- GP-891. Aeromagnetic map of Mount Washington and vicinity, New Hampshire and Maine. 1973. Lat 44° to 44°29'30", long 71° to 72°. Scale 1:62,500. \$1.25.

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- HA-7. Average annual runoff and precipitation in the New England-New York area, by C. E. Knox and T. J. Nordenson. 1955. Scale 1:1,000,000. \$1.50.
- HA-61. Stream composition of the conterminous United States, by F. H. Rainwater. 1962. 3 sheets. \$6 per set.
- HA-76. Geologic map of the surficial deposits of part of southwestern Maine and their water-bearing characteristics, by G. C. Prescott. 1963. Lat 40° to 43°45', long 70°15' to 71°. Scale 1:62,500. \$1.75.
- HA-194. Generalized map showing annual runoff and productive aquifers in the conterminous United States, compiled by C. L. McGuinness. 1964. Scale 1:5,000,000. \$2.
- HA-200. Chemical quality of public water supplies of the United States and Puerto Rico, 1962, shown as Statewide averages, mainly in graphic and tabular form, by C. N. Dufor and Edith Becker. 1964. \$1.25.
- HA-212. Annual runoff in the conterminous United States, by M. W. Busby. 1966. Scale 1:7,500,000. \$1.25.
- HA-225. Surficial geology and availability of ground water in part of the lower Penobscot River basin, Maine, by G. C. Prescott, Jr. 1966 (1967). Lat 44°30' to 45°, long 68°20' to 69°. Scale 1:62,500. Accompanied by 5-page text. \$1.75.
- HA-235. Temperature of surface waters in the conterminous United States, by J. F. Blakey. 1966. Scale 1:5,000,000. 3 sheets. Accompanied by 8-page text. \$1.75 per set.
- HA-243. Effect of drought on water resources in the Northeast, by H. C. Barksdale, Deric O'Bryan, and W. J. Schneider. 1966. \$1.25.
- HA-249. Ground-water favorability of the Connecticut River basin, New England States, by D. J. Cederstrom and A. L. Hodges, Jr. 1967. Scale 1:250,000. 2 sheets. \$1.75 per set.
- HA-282. River discharge to the sea from the shores of the conterminous United States, Alaska, and Puerto Rico, compiled by Alfonso Wilson and K. T. Iseri. 1967, revised 1969. Two sheets. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 1, 38 by 42 inches; sheet 2, 29 by 32 inches. \$3 per set. (Reprinted 1977 (1978).)
- HA-285. Ground-water favorability areas and surficial geology of the lower Androscoggin River basin, Maine, by G. C. Prescott, Jr. 1968. Lat 43°52' to 44°20', long 69°45' to 70°15'. Scale 1:62,500. \$1.75.
- HA-337. Ground-water favorability areas and surficial geology of the lower Kennebec River basin, Maine, by G. C. Prescott, Jr. 1969 (1970). Vicinity of lat 44° to 44°35', long 69°30' to 69°55'. Scale 1:62,500. \$1.75.
- HA-443. Ground-water favorability and surficial geology of the lower Aroostook River basin, Maine, by G. C. Prescott, Jr. 1972 (1973). Lat 46°35' to 47°05', long 67°50' to 68°15'. Scale 1:62,500. \$1.75.
- HA-452. Average water content of snowpack in Maine, by G. S. Hayes. 1972. Lat 43° to 47°, long 67° to 71°. Scale 1:1,000,000. \$1.25.
- HA-485. Ground-water favorability and surficial geology of the lower St. John River valley, Maine, by G. C. Prescott, Jr. 1973 (1974). Lat 47° to 47°20', long 67°50' to 68°40'. Scale 1:62,500. \$1.75.
- HA-486. Ground-water favorability and surficial geology of parts of the Meduxnekeag River and Prestile Stream basins, Maine, by G. C. Prescott, Jr. 1973 (1974). Lat 46° to 46°45', long 67°50' to 68°. Scale 1:62,500. \$1.75.
- HA-529. Ground-water favorability and surficial geology of the Cherryfield-Jonesboro area, Maine, by G. C. Prescott, Jr. 1974 (1975). Lat 44°15' to 44°45', long 67°30' to 68°. Scale 1:62,500. \$1.75.
- HA-535. Ground-water favorability and surficial geology of the Machias-Lubec area, Washington County, Maine, by G. C. Prescott, Jr. 1974 (1975). Lat 44°30' to 44°55', long 66°55' to 67°30'. Scale 1:62,500. \$1.75.
- HA-561. Ground-water favorability and surficial geology of the Portland area, Maine, by G. C. Prescott, Jr. 1976 (1977). Lat 43°30' to 43°45', long 70°10' to 70°30'. Scale 1:24,000 (1 inch = 2,000 feet). Sheet 32 by 42 inches. \$1.75.
- HA-564. Ground-water favorability and surficial geology of the Windham-Freeport area, Maine, by G. C. Prescott, Jr. 1977 (1978). Lat about 43°40' to about 43°50', long 70° to 70°30'. Scale 1:62,500 (1 inch = about 1 mile). Sheet 28 by 40 inches. \$1.75.

***INTERPRETING GEOLOGIC MAPS FOR ENGINEERING PURPOSES.** (1954).
Six maps of the Hollidaysburg, Pa. quadrangle. Scale 1:62,500.

MISCELLANEOUS FIELD STUDIES MAPS

- *MF-259. Preliminary geologic map of the Phillips quadrangle, Maine, by R. H. Moench. 1963. Lat 44°45' to 45°, long 70°15' to 70°30'. Scale 1:62,500. (See Map I-605.)
- *MF-269. Geologic map and section of Kellyland and Vanceboro quadrangles, Maine, by D. M. Larrabee. 1963. Lat 45°15' to 45°37', long 67°25' to 67°30'. Scale 1:48,000. (See Bulletin 1201-E.)
- MF-278. Heavy metals in stream sediment, west-central Maine, by E. V. Post and J. B. Hite. 1964. Lat 45° to 46°, long 68°30' to 71°15'. Scale 1:250,000. 75°.
- *MF-282. Reconnaissance bedrock geology of the Wabassus Lake quadrangle, Washington County, Maine, by D. M. Larrabee. 1964. Lat 45° to 45°15', long 67°45' to 68°. Scale 1:62,500. (See Bulletin 1201-E.)
- MF-301. Map of southeastern Maine showing heavy metals in stream sediments, by E. V. Post, W. L. Lehmbek, W. H. Dennen, and G. A. Nowlan. 1967 (1968). Lat 44° to 45°30', long 66°45' to 69°. Scale 1:250,000. 75°.
- MF-620. Seismotectonic map of the eastern United States, by J. B. Hadley and J. F. Devine. 1974. Three sheets. Sheet A, Tectonic map, lat about 29° to about 49°, long about 66° to about 94°; sheet B, Earthquake epicenters, 1800-1972, lat about 25° to about 49°, long about 66° to about 94°; sheet C, Seismotectonic map, lat about 25° to about 49°, long about 66° to about 94°. Scale 1:5,000,000 (1 inch = about 80 miles). Each sheet 21 by 26 inches. \$2.25 per set. Accompanied by 7-page text. (Reprinted 1977.)
- MF-771. Preliminary landslide overview map of the conterminous United States, by D. H. Radbruch-Hall, R. B. Colton, W. E. Davis, B. A. Skipp, Ivo Lucchitta, and D. J. Varnes. 1976. Lat 25° to 50°, long 65° to 125°. Scale 1:7,500,000 (1 inch = about 118 miles). Sheet 38 by 42 inches. 75°.
- MF-786. Preliminary overview map of volcanic hazards in the 48 conterminous United States, by D. R. Mullineaux. 1976 (1977). Lat about 25° to about 50°, long about 65° to about 125°. Scale 1:7,500,000 (1 inch = about 118 miles). Sheet 29 by 36 inches. 75°. (Reprinted 1977.)
- MF-812. Seismicity map of the conterminous United States and adjacent areas, 1965-1974, by C. W. Stover. 1977. Lat about 24° to about 50°, long about 64° to about 128°. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 29 by 45 inches. 75°. (Reprinted 1977 (1978).)
- MF-845. Seismicity map of the State of Maine, by C. W. Stover, B. G. Reagor, and B. B. Poppe. 1977. Lat 43° to about 47°, long 67° to 71°. Scale 1:1,000,000 (1 inch = about 16 miles). Sheet 25 by 35 inches. 75°.
- MF-861. Map and list of reported occurrences of platinum-group metals in the conterminous United States, by W. N. Blair, N. J. Page and M. G. Johnson. 1977. 2 sheets. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 1, 35 by 41 inches; sheet 2, 29 by 31 inches. \$1.50 per set.
- MF-916. Preliminary map of young faults in the United States as a guide to possible fault activity, compiled by K. A. Howard and others. 1978. Two sheets. Scales 1:5,000,000 (1 inch = about 80 miles) and 1:7,500,000 (1 inch = about 118 miles). Sheet 1, 31 by 41 inches; sheet 2, 32 by 42 inches. \$1.50 per set.

MINERAL INVESTIGATIONS RESOURCE MAPS

The following maps cover the resources indicated for the United States exclusive of Alaska and Hawaii. All are printed at a scale of 1:3,168,000 and are sold at \$1.25 each, unless otherwise indicated.

- MR-2. Uranium deposits, compiled by R. W. Schnabel. 1955. Scale 1:5,000,000. \$1.75.
- MR-3. Potash occurrences, by M. F. Byrd. 1955. Scale 1:5,000,000.
- MR-13. Copper, by A. R. Kinkle, Jr., and N. P. Peterson. 1962.
- MR-17. Asbestos, by A. H. Chidester and A. F. Shride. 1962.
- MR-18. Pyrophyllite and kyanite and related minerals, by G. H. Espenshade. 1962.
- MR-19. Zinc, by E. T. McKnight, W. L. Newman, and A. V. Heyl. 1962.
- MR-22. Bismuth, by J. R. Cooper. 1962.
- MR-23. Manganese, by M. D. Crittenden and Louis Pavlides. 1962.
- MR-25. Tungsten, by D. M. Lemmon and O. L. Tweto. 1962.
- MR-28. Thorium and rare earths, by J. C. Olson and J. W. Adams. 1962.
- MR-31. Talc and soapstone, by A. H. Chidester and H. W. Worthington. 1962.
- MR-35. Beryllium, by W. R. Griffitts, D. M. Larrabee, and J. J. Norton. 1962.
- MR-36. Niobium and tantalum, by R. L. Parker. 1963.

MINERAL INVESTIGATIONS RESOURCE MAPS—Continued

- MR-44. Tin, by P. L. Killeen and W. L. Newman. 1965.
MR-51. Iron, by M. S. Carr, P. W. Guild, and W. B. Wright. 1967. Accompanied by 20-page text.
MR-55. Molybdenum, by R. U. King. 1970. Accompanied by 21-page text.
MR-60. Fluorite, by R. G. Worl, R. E. Van Alstine, and A. V. Heyl. 1974. Accompanied by 13-page text.

MISCELLANEOUS INVESTIGATIONS SERIES

- I-175. Paleotectonic maps of the Jurassic System, by E. D. McKee, S. S. Oriel, V. E. Swanson, J. E. MacLachlan, J. C. MacLachlan, K. B. Ketner, J. W. Goldsmith, R. Y. Bell, and D. J. Jameson, *with a separate section on Paleogeography*, by R. W. Imlay. 1956. Scales 1:2,500,000 and 1:5,000,000. \$15.
I-299. Epigenetic uranium deposits in the United States, by W. I. Finch, I. S. Parrish, and G. W. Walker. 1959. Scale 1:5,000,000. 3 sheets. \$4.25 per set.
I-300. Paleotectonic maps of the Triassic System, by E. D. McKee, S. S. Oriel, K. B. Ketner, J. E. MacLachlan, J. W. Goldsmith, J. C. MacLachlan, and M. R. Mudge. 1959. Scale 1:5,000,000. \$15.
I-387. Fluoride content of ground water in the conterminous United States, by Michael Fleischer. 1962. Scale 1:5,000,000. \$1.25.
I-450. Paleotectonic maps of the Permian System, by E. D. McKee, S. S. Oriel, and others. 1967. \$38.
I-451. Map showing relation of land and submarine topography, Nova Scotia to Florida, by Elazar Uchupi. 1965. Scale 1:1,000,000. 3 sheets. \$4.50 per set.
I-605. Geologic map of the Rangeley and Phillips quadrangles, Franklin and Oxford Counties, Maine, by R. H. Moench. 1971. Scale 1:62,500. \$1.75.
I-676. Map showing distribution of ultramafic and intrusive mafic rocks from New York to Maine, by D. M. Larrabee. 1971. Scale 1:500,000. 2 sheets. \$3 per set.
I-688. Generalized Tectonic map of North America, by P. B. King and G. J. Edmonston. 1972. Scale 1:15,000,000. \$1.75.
I-716. Map showing echo-sounding survey (3.5 kHz) of Massachusetts and Cape Cod Bays, western Gulf of Maine, by B. E. Tucholke, R. N. Oldale, and C. D. Hollister. 1972. Lat 41°40' to 44°, long 70° to 71°. Scale 1:250,000. \$1.50.
I-724. Metamorphic map of the Appalachians, by B. A. Morgan. 1972. Lat 30° to 51°, long 64° to 87°. Scale 1:2,500,000. Accompanied by 10-page text. \$1.50.
I-839. Maps showing bottom sediments on the Continental Shelf off the northeastern United States—Cape Ann, Mass., to Casco Bay, Maine, by D. W. Folger, C. J. O'Hara, and J. M. Robb. 1975. Lat 42°50' to about 43°50', long 70° to 70°50'. Sheet 1, scale 1:124,000; sheet 2, scale 1:250,000. \$2.75.
I-911. Magnetic declination in the United States Epoch 1975.0, by E. B. Fabiano. 1975. Scale 1:5,000,000. \$3.
I-912. Magnetic inclination in the United States—Epoch 1975.0, by N. W. Peddie, W. J. Jones, and E. B. Fabiano. 1976. 2 sheets. Scale 1:5,000,000. \$3.
I-913. Magnetic horizontal intensity in the United States—Epoch 1975.0, by E. B. Fabiano and W. J. Jones. 1976. 2 sheets. Scale 1:5,000,000. \$3.
I-914. Magnetic vertical intensity in the United States—Epoch 1975.0, by W. J. Jones and E. B. Fabiano. 1976 (1977). Two sheets. Scale 1:5,000,000 (1 inch = about 80 miles). Sheet 33 by 47 inches. \$3.
I-915. Magnetic total intensity in the United States—Epoch 1975.0, by E. B. Fabiano, N. W. Peddie, and W. J. Jones. 1976. 2 sheets. Scale 1:5,000,000. \$3.

STATE HYDROLOGIC UNIT MAPS

X
Maine 1974. An overprint of the 1:500,000-scale State base map. Shows counties, location and names of all cities and towns and most of the smaller settlements, and railroads in black; water features in blue; hydrologic boundaries and codes in red; county codes in green. 1958 base. \$1.

STATE MAPS

Maine (base). 1973. Shows State and county boundaries, cities, towns, railroads, and water features in black. It does not show contours. Scale 1:1,000,000. \$1.50.



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STATE MAPS—Continued

- Maine (base). 1973. Shows State and county boundaries, cities, towns, and railroads in black; water features in blue. It does not show contours. Scale 1:500,000. \$2.
- Maine (relief). 1973. Overprint of the 1:500,000 base map showing county boundaries, cities, towns, and railroads in black; highways in purple; and water features in blue. Physical features are brought out by shaded relief in color. Contours are shown in brown. Scale 1:500,000 (1 inch = about 8 miles). Sheet 30 by 44 inches. \$2.

MISCELLANEOUS REPORTS (free upon application to the Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202):

- List 1. Press releases, preliminary maps, and preliminary reports released between Jan. 1, 1938, and Jan. 1, 1945.
- List 2. Press releases, preliminary maps, and preliminary reports released between Jan. 1, 1945, and Jan. 1, 1946.

REFERENCE LIBRARIES

Many of the publications listed herein may be consulted in the following libraries in Maine:

AUGUSTA:
Maine Geological Survey.
Maine State Library.

BANGOR:
Bangor Public.

BRUNSWICK:
Bowdoin College.

CASTINE:
Maine Maritime Academy.

FARMINGTON:
University of Maine.

LEWISTON:
Bates College.

ORONO:
University of Maine.

PORTLAND:
Public.

University of Maine.

SPRINGVALE:
Nasson College.

WATERVILLE:
Colby College.

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List of Geological Survey
geologic and water-supply

Section 1. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

Section 2. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

Section 3. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

Section 4. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

Section 5. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

Section 6. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

Section 7. The following lands are hereby reserved for the use of the United States Fish and Wildlife Service, to-wit: [Faint text describing land reservations]

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