

**Joseph Hyde Pratt** (*North Carolina*)

**Kenneth B. Taylor** (*North Carolina, Associate*)

Joseph Hyde Pratt was the first executive committeeman of AASG in 1908. He returned to that office for 4 years from 1914 to 1917. The title of executive committeeman was changed in 1937 to vice president. He was born in Hartford, Conn., on February 3, 1870, the son of James Church and Jennie Abbey (Peck) Pratt, and died in Chapel Hill, N.C., on June 2, 1942. He was educated in the Hartford public schools and the Sheffield Scientific School of Yale University, where he received the Ph.B. degree in 1893 and the Ph.D. degree in 1896. As an undergraduate,

his chief interest was in chemistry, in which he made a brilliant record. He received the senior appointment and was commencement speaker. A collecting trip through western North Carolina in 1892 with S.L. Penfield and J.A. Holmes shifted his interest from chemistry to geology and mineralogy, in which he majored for his Ph.D. degree in 1896.

Pratt came to North Carolina in 1897 as state mineralogist, and made his home in Chapel Hill the remainder of his life. His choice of a southern state as a permanent residence was not entirely accidental. Prior to the Civil War, his father, James Church Pratt, had lived on a sugar plantation in Louisiana for several years. At the outbreak of the Civil War, he enlisted and served as a captain in the Confederate army. Pratt was state mineralogist from 1897 to 1905 and state geologist from 1906 to 1924. He served as a member of the International Jury of Awards at the St. Louis Exposition of 1904, director of briquetting experiments of the U.S. Geological Survey Coal Testing Plant at St. Louis in 1904–05, chief of the Department of Mines and Metallurgy at the Jamestown Exposition in 1907, and a special expert to the U.S. Twelfth Census. As state mineralogist, his work was devoted almost entirely to mineralogy and geology. He was the discoverer or co-discoverer of four new minerals: pirssonite, wellsite, rhodolite, and mitchellite. During this period he was author or co-author of eight reports on the geology and mining industry of North Carolina. His method of determining ferrous iron in silicates is still standard procedure. As a mineralogist, he was interested in gems and gem materials of the state and was awarded gold medals and diplomas for his exhibits of North Carolina gem materials at the Pan-American Exposition at Buffalo in 1901 and the Charleston Exposition in 1902.



In 1906, he was appointed state geologist in the enlarged agency known as the North Carolina Geological and Economic Survey and immediately took advantage of the enlarged program of work available. He took a leading part in the movement to establish forest reservations in the southern Appalachians and worked incessantly for the passage of the Weeks Law authorizing the acquisition of land for national forests. He organized the Southern Forestry Congress, the North Carolina Forestry Association, and good roads associations; he sponsored good road days, conducted good roads institutes, and sponsored fisheries and drainage conventions.

Following the declaration of war on April 6, 1917, he was commissioned a major in the Reserve Corps on April 24, 1917, and assigned to the 105th Regiment of Engineers, where he was promoted to lieutenant colonel on November 11, 1917, and colonel on October 9, 1918. He received the Distinguished Service Medal for his services overseas. After the war, he returned home with impaired health, from which he never recovered. Being unable to perform the duties of state geologist, he resigned the position in February 1924. With improved health in 1933, he served in various engineering positions with different federal agencies through 1940.

Pratt was one of North Carolina's most prominent and useful citizens, and during his period of active service to the state, probably contributed more to its progress and well-being than any other one person. Although impaired health prevented him from following his programs to their conclusion, he lived to see most of them become a vital part of the state's life. The U.S. Forest Service has acquired thousands of acres of land in the Pisgah, Nantahala, and Croatan National Forests, and the National Park Service has established the Great Smoky Mountains National Park along the Great Smoky Mountains in North Carolina and Tennessee. The legislature of 1921 inaugurated a road-building program that made North Carolina outstanding for many years as the good roads state, while legislation of 1925 converted the Geological and Economic Survey into the more inclusive Department of Conservation and Development, which, within 2 years, contained divisions of Forestry, Game and Inland Fisheries, Commercial Fisheries, Water Resources and Engineering, Mineral Resources, Commerce and Industry, and Public Relations.

Upon the resignation of J.A. Holmes in the fall of 1905 to accept a full-time position with the U.S. Geological Survey, Dr. Joseph Hyde Pratt became acting state geologist and was appointed to the position of state geologist by Gov. R.B. Glenn. Dr. Pratt had been associated with Professor Holmes as state mineralogist on the North Carolina Geological Survey since the middle of 1897, and was aware of and in accord with the program that had been laid for good roads, forestry, water power, and conservation in general; in fact, he had contributed to the laying of the foundation policy for these programs. The North Carolina Geological and Economic Survey, which the legislature of 1905 had established, gave him the opportunity to enlarge the program of work and he immediately took advantage of it. The publications of the Survey between 1905 and 1925 include, in addition to a number of valuable bulletins and volumes on geology and minerals, reports on forests and forest-fire prevention, terracing of farm lands, water power, drainage, fisheries and the fishing industry, and public roads.

During Dr. Pratt's tenure as state geologist, the Survey published 12 bulletins, two volumes, and six economic papers on the geology and mineral resources of the state. Dr. Pratt was author of one bulletin, *Bulletin 25, Zircon, Monazite and Other Minerals Used in the Production of Chemical Compounds Employed in the Manufacture of Lighting Apparatus*, and the six economic papers that dealt with minerals and mining. Six of the 12 bulletins were prepared by Survey personnel, consisting of especially qualified assistants, while the remaining six bulletins and two volumes were prepared by the personnel of cooperating agencies. Four of the 12 bulletins dealt with the metallic minerals and their setting, seven dealt with nonmetallic minerals and rocks, and one was a bibliography of North Carolina geology, mineralogy, and geography.

Volume III and volume V were the most important reports of the Survey from the standpoint of pure science. Volume III, *The Coastal Plain of North Carolina*, published in 1912, was a volume of 552 pages, including two maps. One map showed the surficial formations of the Coastal Plain and the other showed the geologic formations of the Coastal Plain of North Carolina, exclusive of the surficial formations. This report, which was prepared by geologists of the U.S. Geological Survey in cooperation with the North Carolina Geological and Economic Survey, was the most complete report ever prepared and published on the Coastal Plain of North Carolina. This report was in two parts. Part I contained detailed historical accounts and descriptions of Coastal Plain geologic formations and their fossils. Part II contained detailed accounts of the water resources of the Coastal Plain. It was published at a time when the information it contained was important to securing safe drinking water in the Coastal Plain.

Volume V, *The Cretaceous Formations of North Carolina*, published in 1923, was a volume of 604 pages and one geologic map, plus 102 pages of plates, 94 of which illustrated the fossil content of the formations. This report was prepared by geologists of the U.S. Geological Survey in cooperation with the North Carolina Geological and Economic Survey. This report was a major contribution to the geology of Cretaceous formations.

The failure of Dr. Pratt to prepare more than seven reports on the geology and mineral resources of North Carolina for publication by the Geological and Economic Survey during the 19 years he served as state geologist did not indicate any lack of interest in either the geology and mineral resources of the state or publications relating to them. The work of the Survey was so diversified, covering as it did geology and minerals, forests and forest-fire prevention, drainage of swamp lands, water power, groundwater supplies, terracing of farm lands, fisheries and the fishing industry, and public roads, that administrative duties and the preparation of reports that he could best do left little time for the necessary field work to make possible the preparation of geologic and mineral reports.

In addition to the seven reports on the geology and minerals of North Carolina noted above, he prepared, during his tenure as state geologist, nine biennial reports, seven economic papers on roads and road-building, five economic papers on commercial fisheries, and eight economic papers on drainage; he also supervised the preparation of five others. All 34 publications were published by the Geological and Economic Survey. Dr. Pratt was a prolific writer, as shown by the fact that his lifetime bibliography contained slightly over 225 entries, approximately 125 of which, including the 34 mentioned above, were prepared during the 19 years he served as state geologist.

It is very probable that the Geological and Economic Survey, between 1905 and 1925, affected the economic welfare of the state of North Carolina as much as or more than any other state agency. The following state agencies have developed from the Geological and Economic Survey and its programs: the Department of Conservation and Development, State Highway Commission, Wildlife Resources Commission, and Department of Water Resources.