

RESEARCH ON PALEOZOIC FORMATIONS IN VIRGINIA

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ABSTRACT

Paleozoic formations are among the most important as well as most interesting rocks in Virginia. They cover more than one-fourth of the State, contain its most valuable mineral resources, and are replete with problems of great scientific and economic importance.

In recent years, the Virginia Geological Survey, partly in cooperation with the United States Geological Survey, has been attacking some of the major problems and attempting to obtain fundamental data of value to science, to industry, and to well-planned community living.

Field work on the first stages of several significant lines of research has been partly completed. A geologic map of the Appalachian Valley in Virginia, on a scale of 1:250,000, was published in 1933. It shows about 60 formations having a total maximum thickness of about 55,000 feet. Several interesting structural features and patterns have been discovered. A comprehensive report is being prepared. Detailed studies have been made in several widely separated districts in the Valley, resulting in much additional information on stratigraphy, structure, sedimentation, ore deposits, and other resources. Many important problems, chiefly of a research nature, are still to be carefully investigated and solved.

Some research studies have been made upon the remnants of Paleozoic sedimentary formations and upon Paleozoic igneous rocks in the Virginia Piedmont, with new interpretations of paleogeography, geologic history, and ore deposition.