

PREPARED IN COOPERATION WITH
THE NORTH CAROLINA DEPARTMENT OF NATURAL AND ECONOMIC RESOURCES



- EXPLANATION**
- q QUARTZ VEIN
 - qp QUARTZ PORPHYRY—Gray, massive, with phenocrysts of quartz and feldspar. Quartz phenocrysts are commonly as large as 3 mm and locally are 8 mm. Occurs as sills and other small, probably intrusive bodies
 - fp FELDSPAR PORPHYRY—Green, exposed in several small, probably intrusive bodies. Contains feldspar phenocrysts in a fine-grained groundmass. Probably andesitic to felsic in composition
 - flv₁ FELSIC LAVA FLOW(s)—Gray, exposed in western part of park. Contains phenocrysts of feldspar. Flow layered in part
 - flv₂ FELSIC LAVA FLOW(s)—Gray, exposed from eastern part of park to northeast of Purgatory Mountain. Contains small phenocrysts of feldspar and, in part, quartz. Locally flow layered
 - flv FELSIC LAVA—Gray, in several small bodies, with small feldspar and, in part, quartz phenocrysts. May be partly or wholly intrusive
 - flt FELSIC LAPILLI TUFF AND TUFF—Gray. Massive to weakly foliated rock composed of tightly compacted sand- and silt-sized volcanic rock fragments and quartz and feldspar grains, commonly with scattered volcanic rock fragments larger than 4 mm (lapilli). Generally without visible bedding; rarely thin to thick bedded
 - gt TUFF AND LAPILLI TUFF—Green. Visual estimates suggest the chemical composition may range from felsic to nearly mafic with siliceous andesite perhaps most common. Composed of small volcanic rock fragments, feldspar, and, in part, quartz grains. Locally very rich in feldspar crystals. Less hard and resistant to weathering than flt
 - LIMIT OF OUTCROP OR AREA OF ABUNDANT OUTCROPS
 - CONTACT—South contact of gt may be a fault
 - STRIKE AND DIP OF CLEAVAGE
Inclined
Vertical
 - STRIKE AND DIP OF FLOW LAYERS
Inclined
Vertical
 - STRIKE AND DIP OF BEDS
 - × PROSPECT PIT

PRELIMINARY GEOLOGIC MAP OF THE NORTH CAROLINA ZOOLOGICAL PARK, RANDOLPH COUNTY, NORTH CAROLINA
By
Victor M. Seiders
1985

Geology mapped in 1974 by V.M. Seiders, assisted by L.D. Gray

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.