

COLUMNAR SECTIONS

GENERALIZED SECTION OF THE SEDIMENTARY ROCKS OF THE ELLIJAY QUADRANGLE.							
SCALE: 1 INCH = 1000 FEET.							
SYSTEM	FORMATION NAME	SYMBOL	COLUMNAR SECTION	THICKNESS IN FEET	CHARACTER OF ROCKS	CHARACTER OF TOPOGRAPHY AND SOIL	
C A M B R I A N	Nottely quartzite.	Cny		200+	Fine white quartzite.	Sharp, narrow ridges. Rocky soil.	
	Andrews schist (not mapped).			50	Calcareous schist with otterite and iron ore.	Low terraces and slopes. Yellow clay soil.	
	Murphy marble.	Cmp		50-300	Thick-bedded white, blue, and blue and white banded marble.	Valley floors washed over with gravel and clay.	
	Valleytown formation.	Cvt		1200-2000	Fine conglomerate, feldspathic quartzite, graywacke, and fine-grained gneiss, interbedded with dark garnet and otterite schists, graphitic schist, talcose mica slate, and augen gneiss.	Irregular ridges, knobs, flat-bottomed valleys, and lower slopes. Thin sandy and micaceous soil.	
	Brastown schist.	Cbt		1200-1500	Blue and black banded otterite schist, garnet schist, and slate with a few layers of fine graywacke. Black slate usually at the base.	Steep slopes, low irregular ridges, and knobs. Thin sandy and clayey soil.	
	Tusquitee quartzite.	Ctq		20-600	Coarse and fine white quartzite with some quartz conglomerate.	Steep slopes. Sandy and rocky soil.	
	Nantahala slate.	Cnt		1000-2000	Black, bluish-black, and gray slate; in places altered to fine black schist with garnet. Contains a few beds of gray sandstone and graywacke.	Steep slopes, irregular ridges and knobs. Clay soils with slate and schist fragments.	
	Great Smoky formation.	Cgs		5000-8500	Interbedded conglomerate, graywacke, quartzite, mica gneiss, biotite gneiss, mica schist, and graphitic schist. Thick conglomerate and staurolite gneiss in lower part.	High mountains and ridges of irregular trend and plateau country with low irregular ridges. Deep clayey soils mixed with small particles of rock and sand.	
	UNCONFORMITY						
	A R C H E A N	Gneisses and granite.				Light-gray granite, fine-grained granite, gneissoid granite, mica gneiss, conglomerate, graywacke, and kyanite-graphite schist.	Mountainous country and plateau areas.

GENERALIZED TABLE OF PRE-CAMBRIAN IGNEOUS AND METAMORPHIC ROCKS OF THE ELLIJAY QUADRANGLE.					
SYSTEM	FORMATION NAME	SYMBOL	LITHOLOGIC SYMBOL	CHARACTER OF ROCKS	CHARACTER OF TOPOGRAPHY AND SOIL
A R C H E A N	Granite.	Ag		Biotite granite and granite gneiss, coarse and fine, light gray, dark gray, and white. Includes fragments of hornblende gneiss and mica gneiss.	Irregular hills and ridges. Yellow and brown clay soils.
	Pyroxenite, dunite, and serpentine.	Ap		Pyroxenite and dunite, in part serpentinized.	Yellow clay soil with many ledges and fragments of rocks.
	Roan gneiss.	Ar		Hornblende gneiss and schist, with some massive and schistose diorite. Includes many beds of mica gneiss, mica schist, and hornblende mica gneiss, and dikes of altered and unaltered biotite granite.	Mountainous country or depressions between Carolina gneiss areas. Dark-red and brown clay soils.
	Carolina gneiss.	Ac		Interbedded graywacke, mica gneiss, and mica schist, coarse to fine and bluish gray to gray, with some conglomerate. Contains many small beds of hornblende gneiss, large bodies of garnet schist, graphite-kyanite schist, and garnet-kyanite gneiss, and dikes of biotite granite, both altered and unaltered.	Ridges, peaks, spurs, high mountains with irregular crests, and plateau areas. Red and brown micaceous and clayey soils.