

## **Slate Belt** <sup>[1]</sup>

### **Slate Belt**

by Jean H. Seaman, 2006

The Carolina Slate Belt refers to a region of low-grade metamorphosed volcanic rock characterized by slaty cleavages. This region is one of several belts crossing North Carolina in a general southwest to northeast direction. The [Charlotte Belt](#) <sup>[2]</sup> exhibits a medium to high grade of metamorphosed rock to the west of the Carolina Slate Belt, while to the east lies the Triassic Basin. Some of the rock has been quarried near Hillsborough for local use, most notably on the [Duke University](#) <sup>[3]</sup> campus in Durham.

The term "Carolina Slate Belt" was first used by Henry B. C. Nitze and George B. Hanna in 1896 for [Professor Denison Olmsted](#) <sup>[4]</sup>'s *Report on the Geology of North Carolina* <sup>[5]</sup> (3 vols., 1824-27). They confirmed the age of the belt as pre-Cambrian period. The region was an arc of volcanic islands similar to Japan today, and much explosive material settled in the surrounding seas. Lava flows were numerous. The later tectonic movements led to consolidation, metamorphism, and erosion.

#### **References:**

Fred Beyer, *North Carolina, the Years before Man: A Geologic History* (1991).

P. A. Carpenter III, *Metallic Mineral Deposits of the Carolina Slate Belt* North Carolina Department of Natural Resources and Community Development Bulletin no. 84 (1976).

#### **Additional Resources:**

North Carolina Geological Survey. "Carolina Slate Belt (map)." 1998. <http://www.geology.enr.state.nc.us/usgs/carolina.htm> <sup>[6]</sup>

Carpenter, P. Albert III. *Bulletin 84: Metallic mineral deposits of the Carolina Slate Belt*. Raleigh, N.C.: North Carolina Geological Survey, 1976 (reprinted 1993).

Steponaitis, Vincas P., ed. *Research Report No. 25: Stone Quarries and Sourcing in the Carolina Slate Belt* <sup>[8]</sup>. Research Laboratories of Archaeology, The University of North Carolina at Chapel Hill, 2006.

#### **Subjects:**

[Geography](#) <sup>[9]</sup>

[Natural resources](#) <sup>[10]</sup>

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#### **From:**

[Encyclopedia of North Carolina, University of North Carolina Press.](#) <sup>[12]</sup>

1 January 2006 | Seaman, Jean H.

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