



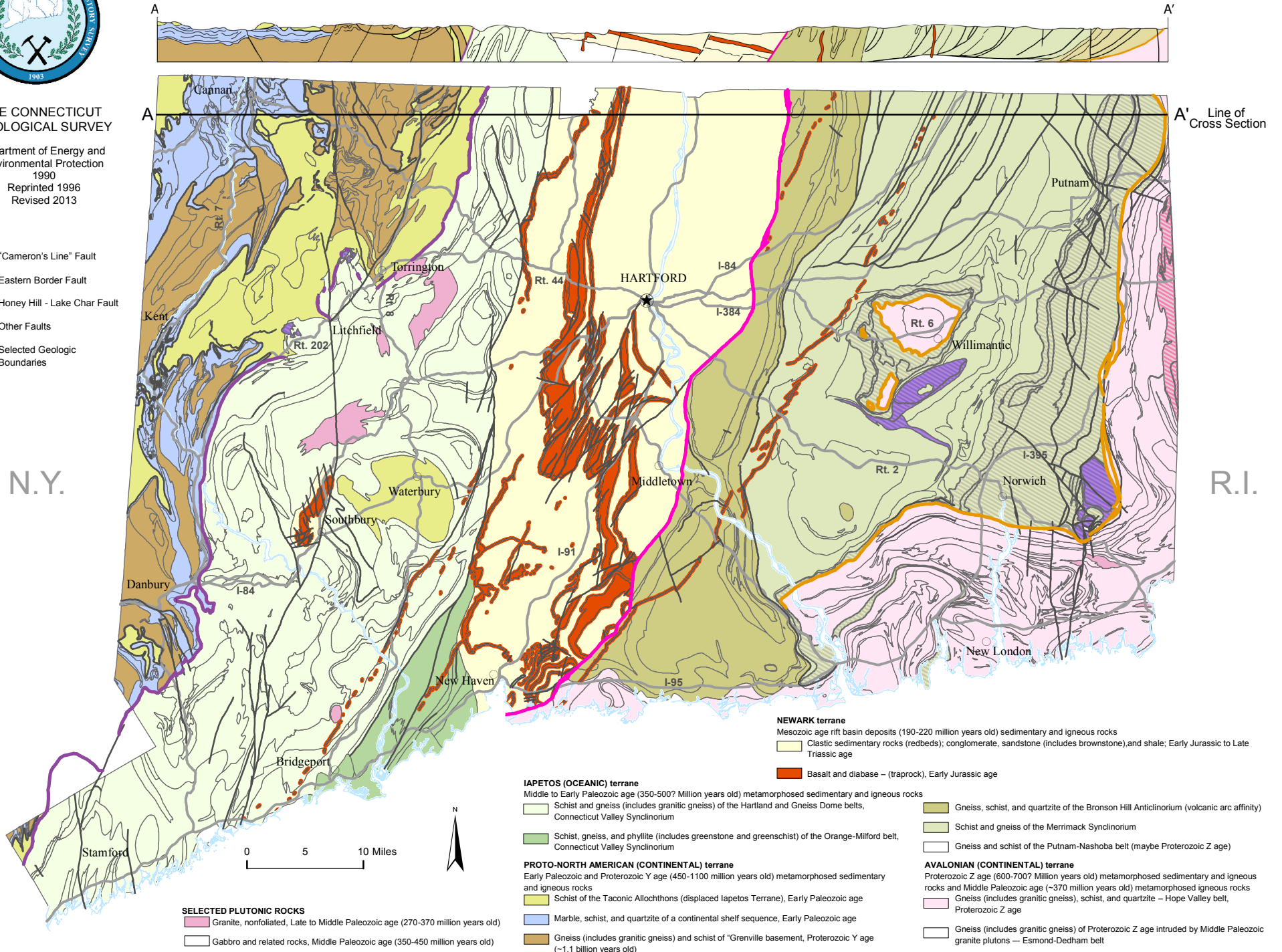
# GENERALIZED BEDROCK GEOLOGIC MAP OF CONNECTICUT

THE CONNECTICUT  
GEOLOGICAL SURVEY  
Department of Energy and  
Environmental Protection  
1990  
Reprinted 1996  
Revised 2013

- "Cameron's Line" Fault
- Eastern Border Fault
- Honey Hill - Lake Char Fault
- Other Faults
- Selected Geologic Boundaries

N.Y.

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## BEDROCK GEOLOGIC HISTORY OF CONNECTICUT

### GEOLOGIC INFORMATION AVAILABLE FROM THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION

- Bedrock Geological Map of Connecticut by John Rodgers shows the bedrock geology of the entire state at 1:125 000 scale; it consists of two sheets: Sheet 1 – the geologic map, and Sheet 2 - cross sections, tectonic map, and references. Sheet 1 is approximately 42" x 55".
- The Geological History of Connecticut's Bedrock by Margaret E. Coleman summarizes the current theories on the geologic history of the state with maps, diagrams, and illustrations for each geologic era. Paperback, 30 pages.
- Rocks and Minerals of Connecticut. A set of twelve mineral and six rock samples, each up to an inch in diameter, in a plastic box. Descriptions of each sample are included in a color brochure that accompanies the set. All samples are from Connecticut.
- Generalized Bedrock Geologic Map of Connecticut. 8.5" x 11" map
- Bedrock geologic quadrangle maps are technical publications which include a 1:24,000 scale map and some explanatory text. Quadrangle maps are available for most of the 7.5' quadrangles in the state. Consult the List of Publications before ordering, or use the index on the next page; order by quadrangle as follows: "Bedrock geologic map of the (quadrangle name) quadrangle." Order only those quadrangles shown as published.
- Connecticut in the Mesozoic World by J. Gregory McHone, complete Mesozoic geologic history, fully illustrated, field site descriptions, lesson plans. Paperback, 40 pages with CD.
- Great Day Trips to Discover the Geology of Connecticut by J. Gregory McHone is a travel guide and explanation of various geologic sites in Connecticut. Paperback, 206 pages.
- Roadside Geology of Connecticut and Rhode Island by James W. Skehan. Maps, photos, illustrated interpretations and descriptions of the landforms and rock cuts seen along 20 routes in CT and RI. A glossy travel guide for the curious roadside observer. Paperback, 288 pages.
- Guidebooks to fieldtrips. Nine different guidebooks are available. One guidebook is the Redbeds of Central Connecticut, others include fieldtrip reports covering many aspects of Connecticut geology. Consult the List of Publications. Many reports are technical.

List of Publications of the State Geological and Natural History Survey  
[www.ct.gov/deep/geology](http://www.ct.gov/deep/geology)

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Geologic regions (terrane) on this map reflect the role of plate tectonics in the geologic history of Connecticut. Each terrane is named after its plate tectonics ancestry.

From 450 to 250 million years ago, during the Paleozoic Era, several crustal plates, including Africa and Eurasia collided with the North American plate to create the Appalachian Mountains and the supercontinent Pangea. During this collision **Avalonia**, a small continent believed to have been part of the African plate, was thrust against the continent of **Proto-North America**, closing and collapsing the intervening Iapetus Ocean. The collision deformed and metamorphosed both the continental rocks of Proto-North America and Avalonia and the oceanic rocks and sediments of the Iapetus Ocean floor. This process created the schists, gneisses and granites exposed today in eastern and western Connecticut. Features of these metamorphic and igneous rocks show this complex geologic history, confirming the continental and oceanic origins and the processes of plate tectonics.

Shortly after the collision ended at the beginning of the Mesozoic Era or about 235 million years ago, plate tectonics processes reversed. Pangea began to break apart, initiating the opening of the Atlantic Ocean and leaving Avalonia welded to North America. In the early stages of this breakup, rift basins formed along and on both sides of the zone where the Atlantic Ocean finally opened. The Newark terrane in central Connecticut is the eroded remnant of one of these rift basins. It contains 200 million year old sedimentary rocks (brownstone) and lava flows and intrusions of basalt (trap rock).

### INDEX OF BEDROCK GEOLOGIC QUADRANGLE MAPS

