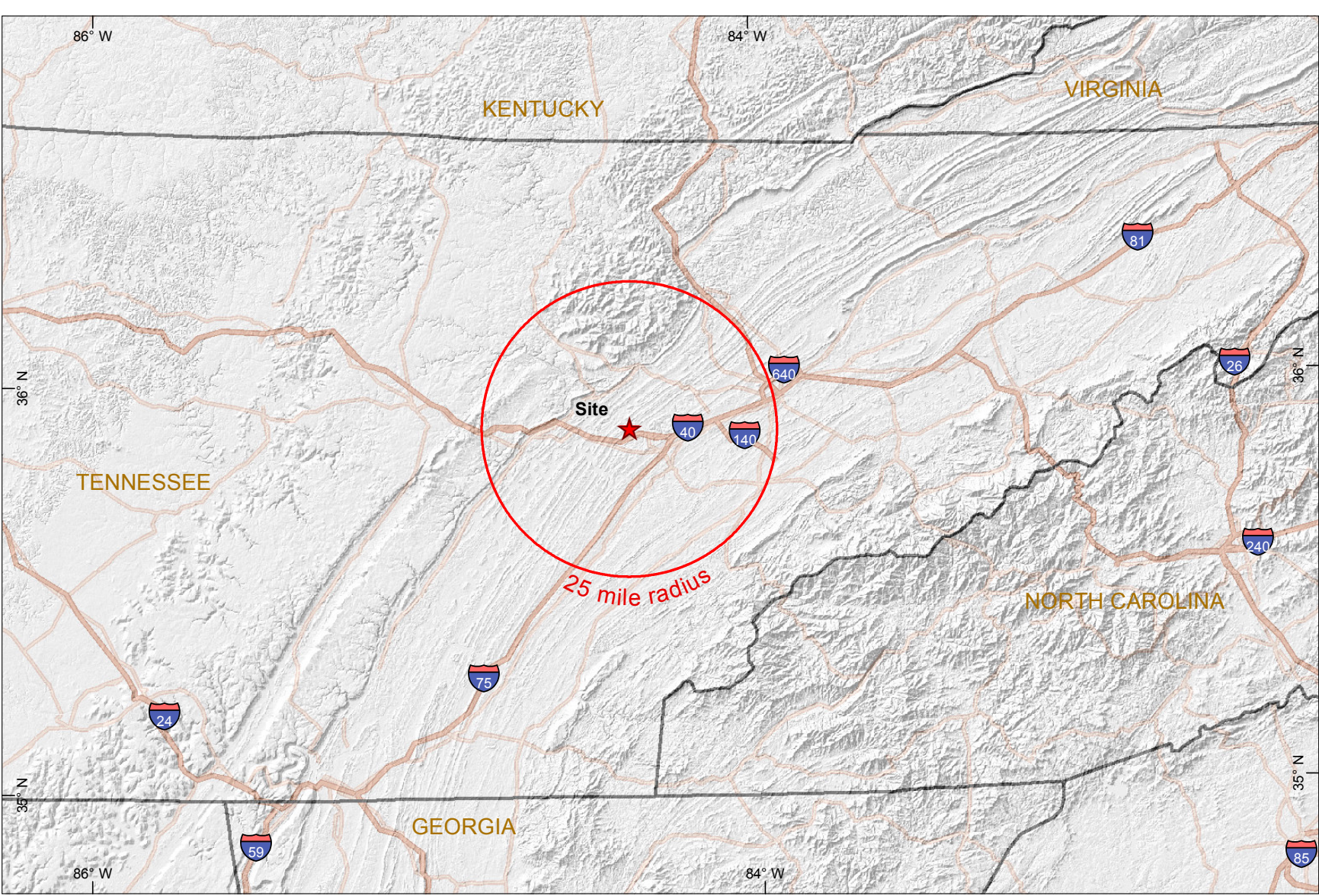
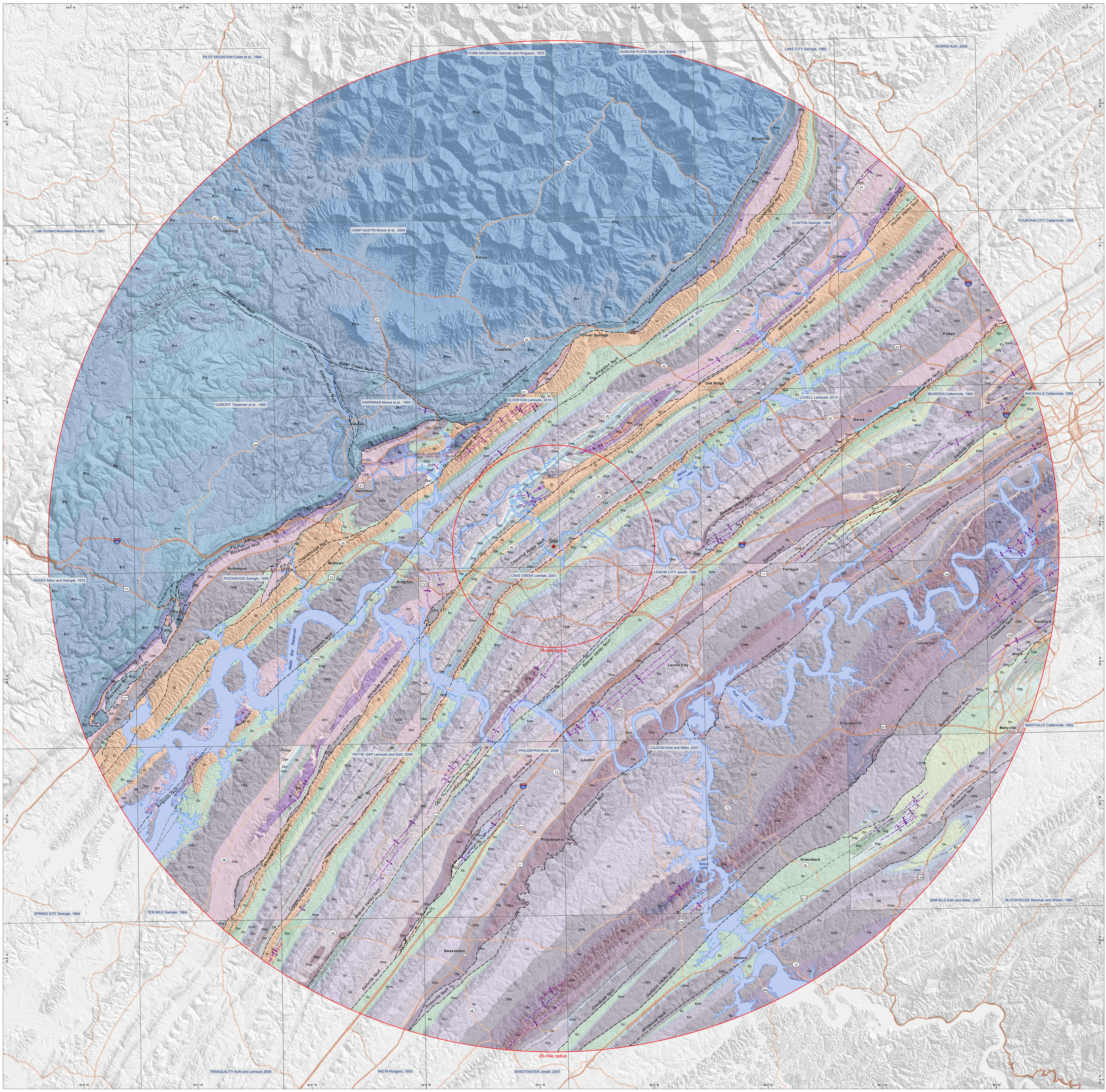




EXPLANATION

**Geologic Units**

**Pennsylvanian**

- Upper**
  - Mid** Middle Pennsylvanian - undivided
    - Pd** Crooked Fork Group - undivided
    - Pd** Crab Orchard Mountains Group & Gizzard Group - undivided
    - Pd** Gizzard Group - undivided
- Lower**
  - Ma** Pennington Formation
  - Ma** Newman Limestone

**Mississippian**

- Upper**
  - Ma** Fort Payne Fm.
  - Ma** Chattanooga Shale
- Lower**
  - Ma** Rockwood Fm.

**Ordovician**

- Upper**
  - Or** Sequatchie Fm.
  - Or** Reedsville Shale
- Middle**
  - Chickamauga Supergroup**
    - Nashville Group**
      - Or** Cannon Ls.
      - Or** Cathays and Leipers Fm. - undivided
      - Or** Hermitage Fm.
    - Chickamauga Group**
      - Or** Chickamauga group undivided
        - Or** Moacanin Fm.
        - Or** Witten Fm.
        - Or** Bowen Fm.
        - Or** Benbot Fm.
        - Or** Rockwell Fm.
        - Or** Fleanor Shale
        - Or** Blackford Fm. (includes Elders mbr.)
      - Or** Bays Formation
      - Or** Ochosee Shale
      - Or** Chapman Ridge Sandstone
      - Or** Holston Formation
      - Or** Lenoir Ls.
      - Or** Athens Shale
- Lower**
  - Knox Group**
    - Or** Knox Group - undivided
    - Or** Mascot Dolomite
    - Or** Kingsport Fm.
    - Or** Longview Dolomite
    - Or** Chepultepec Dolomite
    - Or** Copper Ridge Dolomite
  - Or** Consassa Group
    - Or** Consassa Group - undivided
    - Or** Maryharville Ls.
    - Or** Mulchusky Shale
    - Or** Dismal Gap Fm. (Maryville Ls.)
    - Or** Rogersville Shale
    - Or** Friendship Fm. (Rutledge Ls.)
    - Or** Pumpkin Valley Shale

**Geologic Structures**

- Syncline** dashed where approximate
- Anticline** dashed where approximate
- Overturned Syncline** dashed where approximate
- Major Fault** dashed line
- Minor Fault** dashed line
- Contact** dashed where approximate, dotted where concealed

**Other**

- Source map boundary** dashed line

- Geologic Map Sources:**
- Cattermole, 1958, Knoxville 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Cattermole, 1960, Bearden 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Cattermole, 1962, Maryville 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Cattermole, 1966, Fountain City 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Coker et al., 1984, Pilot Mountain 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Garman and Ferguson, 1975, Fork Mountain 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Jewell, 1966, Lenoir City 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Jewell, 2007, Sweetwater 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Kohl and Lemiszak, 2008, Tranquility 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Kohl and Miller, 2007, Binfeld 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Kohl and Miller, 2007, Loudon 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Kohl, 2008, Norris 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Kohl, 2008, Philadelphia 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Lemiszak et al., 2012, Oak Ridge Geologic Map, 1:24,000.
  - Lemiszak, 2001, Cave Creek 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Lemiszak and Kohl, 2008, Pattie Gap 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Lemiszak, 2013, Lovell 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Lemiszak, 2015, Elvertown 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Mills and Swingle, 1972, Roddy 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Moore et al., 1993, Harritman 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Moore et al., 2004, Camp Austin 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Neuman and Wilson, 1960, Blockhouse 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Rodgers, 1953, Niota 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Statter and Sykes, 1970, Duncan Flats 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Stearns et al., 1951, Crab Orchard Mountains Geologic Map, 1:24,000.
  - Swingle, 1958, Rockwood 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Swingle, 1960, Lake City 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Swingle, 1964, Spring City 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Swingle, 1964, Ten Mile 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Swingle, 1964, Clinton 7.5-min Quadrangle Geologic Map, 1:24,000.
  - Tiedeman et al., 1965, Cardiff 7.5-min Quadrangle Geologic Map, 1:24,000.

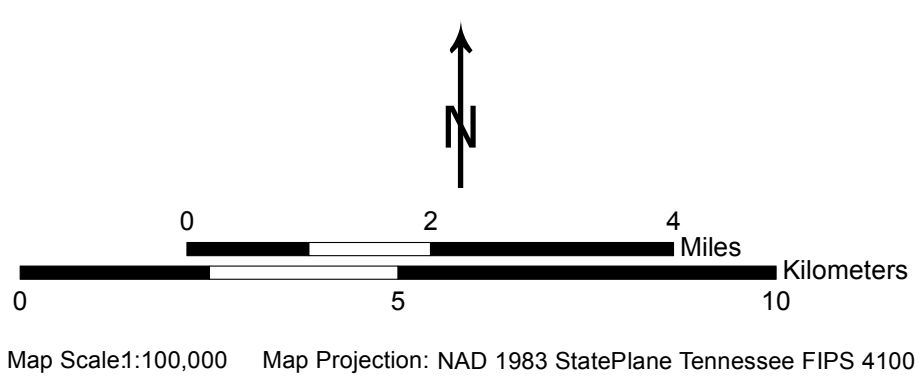


PLATE 1  
Clinch River Site Vicinity Geologic Map