Field Methods Exercise 04: Geologic Map of High Point State Park (v3, Fall 2009)

4A. Pre-Field Exercise
Location: NJCU Campus

Task: Map strike and dip of 4 boards hammered in ground, representing the contact between Ordovician and Silurian rocks.

Participants: High Point Teams (no more than 3 people each)

Deliverables:
- Airphoto of map area with outcrop locations accurately plotted (see p.2), including:
  - 4 Outcrop (board) locations, with formation location, contact, and strike and dip of bedding plotted accurately on map
  - North arrow
  - Scale Bar (1” = 50 feet)
  - 3 map boundaries already produced on airphoto:
    - NW map boundary = East side of Vodra Hall
    - NE map boundary = West side of Guarnieri library
- True-scale Cross-section (same scale horiz & vert) perpendicular to trend of “fold” axis

Due date: prior to High Point State Park Geologic Mapping Exercise

4B. Field Exercise – High Point State Park
Location: High Point State Park, Hwy 23, north of Sussex, NJ

Task: Prepare a geologic map, with locations of outcrops, for a defined field area within High Point State Park (see p.3)

Participants: Self-selected teams (≤ 3 people)

Deliverables:
- Geologic map of Silurian and Ordovician Rocks in the area, showing:
  - Martinsburg (Ordovician)-Shawangunk (Silurian) formation contact (solid where known, dashed where inferred)
  - Outcrop locations, shown in deeper shade of Fm color, with Strike & Dip of bedding
- True-scale cross-section perpendicular to strike
- Copies of all field notes of team members
- Short (+/- 500 words) narrative describing field procedure
- Powerpoint presentation (including scanned image of group geologic map) of local and regional geologic history, from Late Precambrian to present

Due Date: After completion of Exercises 1, 2, and 3 (estimated early December)

Evaluation: As with earlier group exercises, individual grades are based upon:
- Quality of group product (50%)
- Individual effort and participation (50%)