

Topic 04—REVISED OUTLINE
Pennsylvania Natural History (w/ Botanical Emphasis)

- I. Introduction to PA floristics
 - A. Numbers of species
 - B. Woody species
 - C. Extirpations
 - D. Important families
 - E. Important genera
- II. Some biogeographic patterns
 - A. Pattern #1
 - B. Pattern #2
 - C. Pattern #3
 - D. Pattern #4
- III. Physiogeographic provinces
 - A. Appalachian Plateaus
 - B. Ridge & Valley
 - C. Piedmont
 - D. Coastal Plain
 - (E.) Blue Ridge
 - (F.) New England
- IV. Geological history & Appalachian uplift
 - A. Taconic Orogeny
 - B. Post-Taconic Passive Phase
 - C. Acadian Orogeny
 - D. Post-Acadian Passive Phase
 - E. Alleghenian Orogeny
 - F. Pangean Passive Phase
 - G. Mid-Jurassic Rifting Phase
 - H. Isostatic rebounding & peripheral bulging
- V. The Lower Susquehanna River Gorge and floodplain (U.S.A.) as a riparian refugium for vernal forest-floor herbs
 - A. History & Geology of the Susquehanna River Gorge
 - B. Vernal Herbs (from Bratton et al., 1994)
 - 1. General characteristics & significance
 - 2. Some highly restricted species
 - 3. Moderately restricted species
 - 4. Unrestricted species
 - C. Vernal Herbs Sensitive to Human Disturbance (from Bratton et al., 1994)
 - D. Lower Susquehanna as a Refugium for PA Vernal Herbs (from Bratton et al., 1994)

Required Reading:

1. Pages 5-7 in Rhoads & Block.
2. Page ix-xi in Wherry ET, JM Fogg, & HA Wahl. 1979. Atlas of the Flora of Pennsylvania. The Morris Arboretum, Philadelphia.
3. Bratton, SP, JR Hapeman, AR Mast. 1994. The Lower Susquehanna River Gorge and floodplain (U.S.A.) as a riparian refugium for vernal forest-floor herbs. *Conservation Biology* 8: 1069-1077.

Suggested Supplementary Reading:

1. Keever, C. 1973. Distribution of major forest species in southeastern Pennsylvania. *Ecological Monographs* 43: 303-327.
2. Steucek, GL. 1994. *Recent history of plant communities*. Pp. 151-180 in DA Zegers (ed.) At the Crossroads: A Natural History of Southcentral Pennsylvania. Millersville University: Millersville, Pennsylvania, USA.