GEOMORPHIC PROCESSES
15-040-504

Laboratory #3: Field Trip to Mammoth Cave

Purpose:

1. Familiarization with the geology and regional geomorphology of the Interior Lowlands province of the U.S.

2. Observe and describe soils *in situ.*

3. Observe surface and subsurface karst features.

Readings:

Haney, D.C. and M.C. Noger, 1992. Roadside geology along Interstate Highways 71 and 65 in Kentucky. *Kentucky Geological Survey Special Publication 17*. 44 p.

Palmer, A.N., 1981, Chapter 2, The cave and its surrounding, *A geological Guide to Mammoth Cave National Park*, p. 3-24.

References:

Palmer, A.N., 1991, Origin and Morphology of limestone caves, *Geological Society of America Bulletin*, 103:1-21.

Procedure:

This trip is intended to be an enjoyable exposure to the geomorphology of the midcontinent and to karst features of the Mammoth Cave area. You are asked to make a collection of photographs of the features listed below. Each photographic should include a caption with a complete discription of the feature and when and where the photographic was taken:

1. Dripping Springs or Chester Escarpment
2. Pennyroyal Plateau
3. New Albany Shale (on the fly probably)
4. Muldraugh Escarpment
5. Stylolites
6. Terra Rosa
7. Big Clifty Sandstone
8. St. Genevieve or St Louis limestone
9. Karst window
10. Collapse doline
11. Solution doline
12. Chert nodule