

**PROPOSAL: Flora, Vegetation & Wilderness Remnants in the 'Falls-of-Ohio' Region: Inventory, Teaching, Conservation and Restoration for the Twenty-first Century.**

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This is an initial outline of the concept; see website for examples from central Bluegrass.

[http://www.bluegrasswoodland.com/Bluegrass\\_and\\_Knobs.html](http://www.bluegrasswoodland.com/Bluegrass_and_Knobs.html)

**Rationale.** Before its settlement during 1770-1800, the Louisville area included a complex mosaic of native vegetation that reflected varied geology, accumulated influences of the Ohio River and glaciers to the north, plus more recent effects of animals and human populations. Virtually all of this mosaic has now been removed or radically altered, except in some of the peripheral hills. Much information about the original landscape can be gleaned from historical sources, museum collections and modern remnants, but there has been little previous effort to bring data together for a complete picture. It is critical for good conservation in this challenging environment that we gain a better concept of the original vegetation. Conservation and future restoration should be measured, in part, against this natural history.

**Goal.** This project will provide an account of the original landscape that can be easily understood and applied for public information, for planning conservation of the better remnants, and for a technical baseline to be used in future research and assessment. The presentation will be usable by the lay person, and especially schools or colleges, but thoroughly supported by technical appendices that include species lists, vegetation maps, environmental data, and bibliographic references.

**PRODUCTS**

**1. Local herbarium (DHL);** to be re-established in Jefferson County, Kentucky, with partnership of Indiana University Southeast (JEF).

**2. Educational program;** this will be initiated for regular field work in the region, with monthly trips for all interested people.

**3. Booklet;** this will be assembled, together with associated slide-presentations, maps, and databases; it will have following sections.

- **Summary.** This will present the overall documented botanical patterns for the region, together with recommendations for education, research, conservation and restoration.
- **Text.** This will present a description of the original landscape, based on information about the original native flora, vegetation, soils, geology and other natural environmental patterns in the area. It will be illustrated with numerous figures, photographs, diagrams and tables. The sequence of topics will allow easy application for educational use at the high school level or above. Technical information will be worked into conclusions about the original natural features, and into recommendations for planning, implementing and assessing conservation or restoration in the future. The significant past and future role of natural areas, parks and greenways will be emphasized.
- **Maps.** These will include locations for selected species of interest, historical features of the original vegetation, details of current remnants, an estimated reconstruction of the original vegetation, overlays of hydrology, topography, soils and geology, plus summarized effects of settlement and development. Material will be printed and supplied in electronic (GIS) format.

● **Technical Appendices.** These will include lists of native and alien plant species, with notes on their distribution, special notes on rare, endangered and locally extinct species, technical details of the vegetation types, historical and archaeological information, analysis of relationships between vegetation and environment, notes on horticultural potential of native flora, and various applications for conservation planning.

● **Bibliography.** This will be comprehensive, drawing on all available biological sources in the academic and popular literature, plus significant historical sources, making special use of the Filson Club's library.

**Schedule, Funding and Vision.** This project could be accomplished within 12-24 months during 2017-2019, for \$10,000 to \$100,000, depending on the level of detail and presentation. I am interested to discuss the various funding options with potential supporters.

Resulting education could be combined with establishment of the Waterfront Botanical Garden in downtown Louisville by Botanica. Although that site is nested within an extremely urban context, it forms an ideal place to reconnect city-dwellers with the world of plants around them. Moreover, the site is a convenient base at which to meet for tours of more peripheral areas that have botanical or ecological interest around the city.

One can conceive of programs in the near future, when participants will meet at the garden for local education then tour the region in day-trips (or longer). There is a growing market for such programs, from elementary schools to college level to continuing education for all. A fee-paying system could be set up for support.

