

A photograph of a steep, rocky hillside. The foreground and middle ground are dominated by a light-colored, textured rock face that appears to be a natural erosion feature. Sparse green vegetation is scattered across the slope. In the background, a dense forest of green trees is visible, suggesting a natural park setting. The overall scene is a natural landscape with geological features.

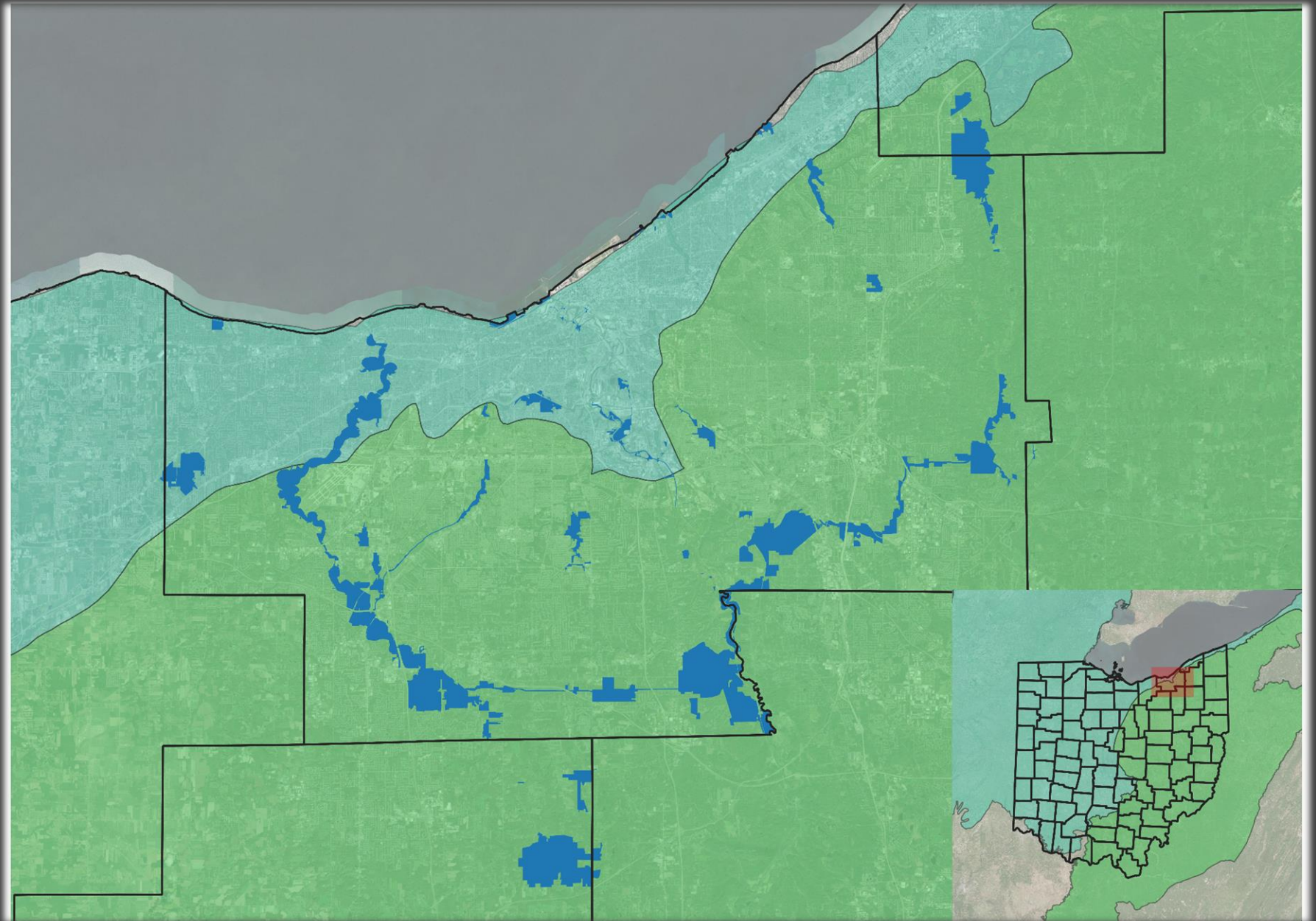
Rare and Interesting Natural Features of Cleveland Metroparks

John E. Reinier, Wetland Ecologist
Natural Resources Division

Importance

- Good examples of these natural features becoming increasingly rare
- Cleveland Metroparks protects some of the best remaining examples
- Inventory is critical in the face of rapid ecological change
- Cuyahoga County is particularly interesting
 - And still plenty of opportunities for new discoveries

- Ohio (and Cuyahoga County) bisected by ecosystem province boundary
- USFS Ecosystem Provinces 221 (Eastern Broadleaf Forest Province) and 222 (Midwest Broadleaf Forest Province)
- Divisions generally correspond with bedrock and soil divisions











smooth aster (*Symphyotrichum laeve*)



fringed gentian (*Gentianopsis crinita*)



pasture rose (*Rosa carolina*)



wild columbine (*Aquilegia canadensis*)





Devonian shale bluffs



rock serviceberry (*Amelanchier sanguinea*)



low serviceberry
(*Amelanchier humilis*)



Summary

- 99 rare plant records submitted to Ohio DNR since 2012
- Numerous noteworthy observations and new county records
- Species delisted
- Many observations have contributed significantly toward land acquisition efforts



Management

- Data collection and management is critical
- Disturbance plays critical role
- Early detection and response
- Nature is the best designer
- Balance recreational use with protection