



PLATEAU ESCARPMENT COA

The Plateau Escarpment Conservation Opportunity Area (COA) includes 1,000,124 acres in southeastern Kentucky and lies primarily within the Cumberland Plateau physiographic region. It is associated with the Pottsville Escarpment, an area of erosion resistant sandstone that forms distinctive cliffs, gorges and is considered the transition from the Cumberland Plateau to the Bluegrass physiographic regions. The bulk of the COA includes the Rockcastle River watershed, which is designated as a state Wild River. This COA also contains priority areas identified in the upper Kentucky and extreme Upper Green River watersheds. The COA is adjacent to the South Fork COA to the south.

The Plateau Escarpment COA consists of 63% deciduous and mixed forest which are concentrated in the river gorges and steeper forested areas. A variety of terrestrial community types occur within this region, allowing for a diverse flora and fauna. These community types range from the shallow, xeric soils of sandstone ridges with pine oak forests/woodlands to Appalachian mesophytic forests in deep ravines that contain rich, deeper acidic soils.

Ninety percent of the 156,764 acres of protected lands within the COA are owned and managed by the Daniel Boone National Forests (DBNF). There are limited agricultural activities occurring throughout the Plateau Escarpment COA. Most is subsistence farming, with 25% of the total acreage within the COA considered hay/pasture. There are the usual concerns of agricultural runoff and leaking septic systems which impact water quality. With the topography and movement of water through tributaries in the



Sandstone rock shelters are sometimes used as maternity sites by the endangered Virginia big-eared bat. Photo: John MacGregor



The Plateau Escarpment lies within the Cumberland Plateau physiographic region, and is primarily deciduous and mixed forest. Sandstone geology in the area forms distinctive cliffs, gorges, and rock shelters that are essential habitat for many Kentucky SGCN. Photo: Zack Couch, KDFWR

Plateau Escarpment SGCN Priority by Taxa

Taxa	Moderate Priority	High Priority	Highest Priority	Data Deficient	Plant	Grand Total
Amphibians	2	2	1	6		11
Birds	69	11	1	1		82
Crustaceans		2	1	7		10
Fishes	1	5	3	2		11
Freshwater Mussels and Snails	3	14	9	3		29
Insects	1	5	2			8
Mammals	4	10	1	9		24
Plants					11	11
Reptiles	1			3		4
Grand Total	81	49	18	31	11	190

landscape to the Cumberland, Green and Kentucky Rivers, limiting pollutants is of utmost importance.

The top threats identified within this COA are Natural System Modification, Pollution, and Agriculture/Aquaculture. The Plateau Escarpment has a high potential for significant conservation projects to address these threats including long-term site protection, restoration work, and habitat management. For aquatic species, innovative work with partners can serve to reduce pollutants and identify barriers in need of removal. For terrestrial species, prescribed fire, invasive species management, and management of woodlands and prairie/barrens habitat benefit a variety of SGCN. OKNP currently works within this COA to manage one of the largest seep and pine barrens restoration sites.

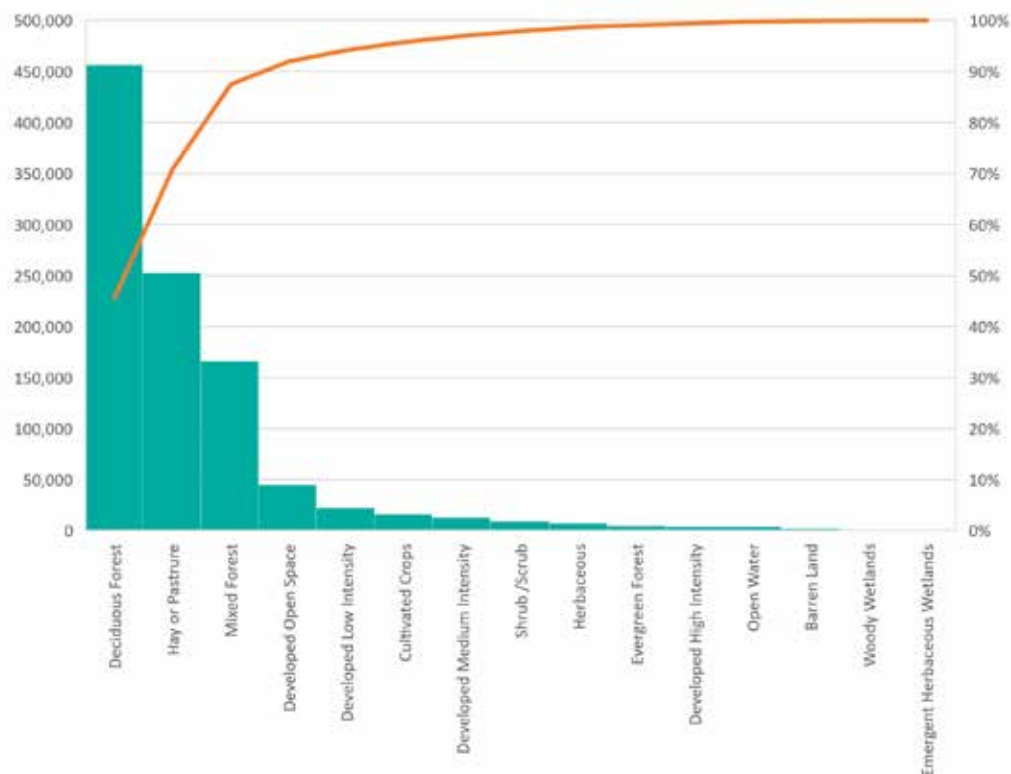
There are 190 records of SGCN within the Plateau Escarpment COA. Of the 18 highest priority SGCN, there are 9 mussels, 3 fish, 2 insects, 1 mammal, 1 bird, 1 crustacean and 1 amphibian. In addition, the COA contains 11 SGCN plants. Several globally rare terrestrial natural communities occur within this COA, including riverscours prairies of the Rockcastle River and Buck Creek, upland seeps/wetlands of the Plateau Escarpment, xerohydric prairies of the Interior Plateau, upland pine oak savannahs, barrens, woodlands and glades in the Plateau Escarpment, and limestone prairies and barrens of the Outer Bluegrass near Stanford. These rare terrestrial communities contain concentrated populations of SGCN and are important areas SGCN conservation activities.



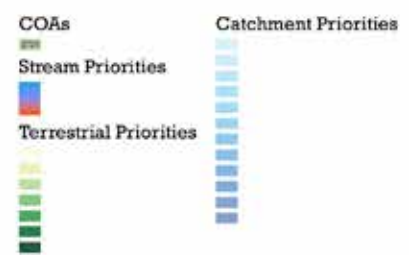
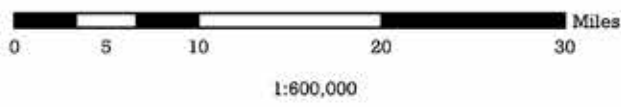
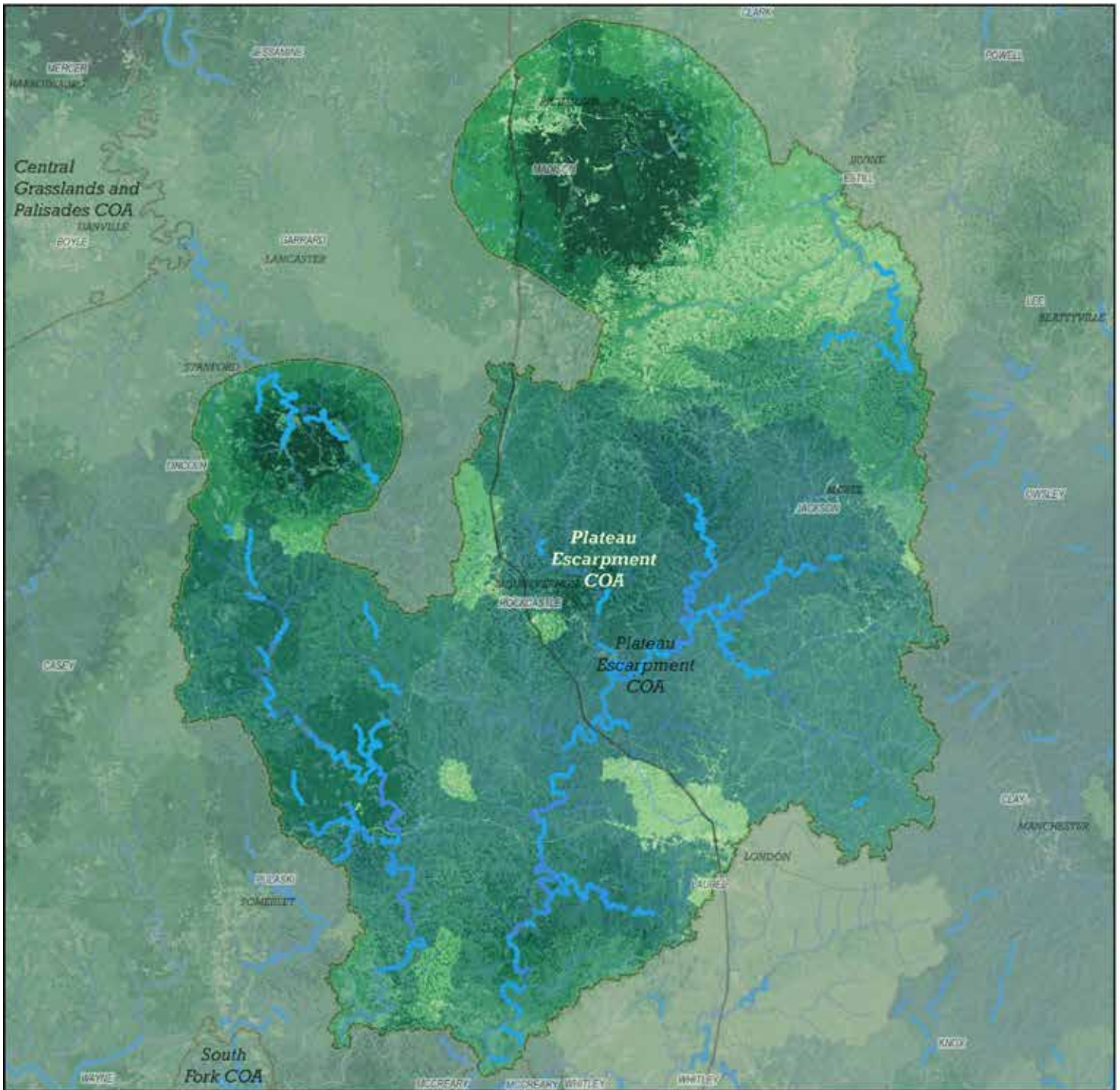
The globally rare Kentucky Lady's-Slipper orchid prefers mature forest and is sensitive to canopy disturbance. Photo: Tara Littlefield

Partners have long recognized the importance of the Plateau Escarpment and its surrounding landscape. Actions identified for this COA include education and awareness of these natural resources and their management and protection needs. External capacity building is identified as a critical tool for reaching goals in this COA. Working with partners and building projects between state and federal agencies such as KDFWR, Office of Kentucky Nature Preserves, Division of Water, Division of Forestry, Daniel Boone National Forest and Natural Resource Conservation Service are critical. In addition, efforts should include working with non-governmental organizations, private partners and land trusts. Land and water management was identified as the third highest priority action item. Actions that help prevent pollution and protect watersheds and healthy forest and open lands will be critical to the management of SGCN.

Plateau Escarpment Land Use by Acres



Plateau Escarpment COA



Map prepared by GIS staff at KDFWR in partnership with OKNP and TNC. Service Layers courtesy of Source: Esri, USDA FSA, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, DGI, KyFromAbove Partners, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS.

