

## Appalachian Landscape Conservation Cooperative (LCC)

#### Vision Statement

The Appalachian LCC is a science and management partnership to protect the valued resources and biological diversity of the Appalachian region, sustain the benefits provided by healthy and resilient ecosystems to human communities, and help natural systems adapt to large landscape-level stressors and those stressors that may be magnified by the changing climate.

### **Mission Statement**

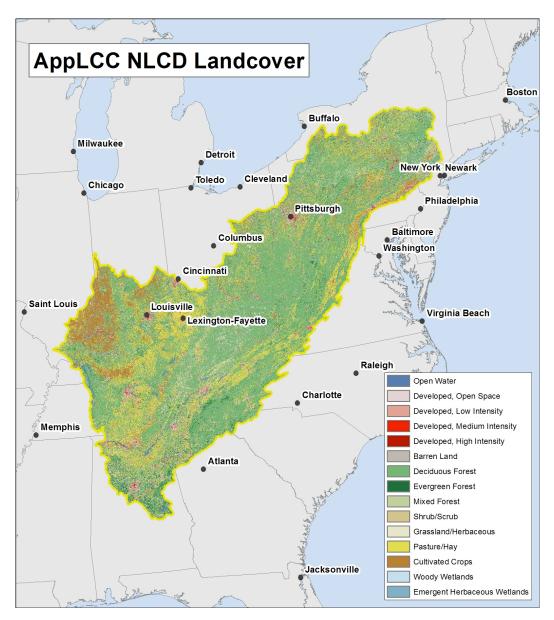
The Mission of the Appalachian LCC is to achieve sustainable landscape-level conservation through partnerships, shared resources, enhanced science-based management capacity, landscape level planning, and supporting conservation actions and research as part of a national network.

### Background

Appalachia is in an era of monumental conservation challenges. These include: the wholesale loss and fragmentation of natural habitats; genetic isolation of species; increasing threats associated with wildfire and change in natural disturbance regimes; dramatic changes in the water cycle with an increased risk of flooding as well as water scarcity; and the expansion of harmful invasive species. The effects of these threats will be exacerbated by expanding and emerging land-use changes and the changing climate. It is imperative that natural resource management agencies, science providers, conservation organizations and other industries and communities work together to understand the impacts of these stressors and determine how best to address these challenges within the Appalachian region.

The mountain region and drainage system along the Cumberland Plateau represents the richest of temperate areas in North America in terms of its biodiversity which evolved due to the Appalachian region's diverse topography with long broad ridges, steep slopes, deep gorges and wide intermountain valleys and geologic stability over long evolutionary time-scale periods. This unique combination of physical characteristics and history has resulted in a broad range of microhabitats and the presence of numerous species and communities that at one time existed in abundance but now only survive in particular places in the region. Numerous invertebrates, salamanders, crayfish, freshwater mussels and fish are restricted to single watersheds or peaks due to millions of years of isolation and favorable conditions. The Southern Appalachians are a global hotspot for aquatic species diversity in part because streams and rivers drain toward the south, allowing aquatic species to persist during successive glaciations.

Human communities across the region are heavily reliant on nature-based industries, historic traditions of sport hunting, fishing and outdoor recreation, logging, and agriculture. The mountains in the region play a critical role safeguarding and buffering the headwaters of key watersheds that serve the heavily populated regions of the North Atlantic, South Atlantic, and Great Lakes. Major threats to the biological diversity, as well as the environmental services and benefits to society they provide, include the complete loss, fragmentation, or disturbance to terrestrial and aquatic systems due to expanding energy development, urban and suburban expansion with its attendant pollution and roadways, and changes to the hydrologic cycle due to extreme levels of water consumption, withdrawal, and increased variability in the climate system.



Map of the Appalachian LCC with National Land Cover Database Overlay

# **Cooperative Structure**

The organizational structure of the Appalachian LCC governance consists of four levels: (1) Interim Steering Committee level (ISC) which is the decision-making and oversight body with the Executive Sub-Committee as a sub-set drawn from the full Committee; (2) Staff and Team level (includes Core LCC staff (hired) or partner staff); (3) Group level (working or advisory groups); and (4) Stakeholder level (to reflect the formal commitment of the Appalachian LCC to engage, and put in place, a process to report-out on the work of the LCC as well as to solicit feedback and suggestions from the broader stakeholders groups of impacted members of society across the Appalachia region).

For more information about the Appalachian LCC, please visit the Appalachian LCC website, <u>http://www.applcc.org</u>.