Data needs assessment Appalachian LCC

The purpose of conservation planning is to assess the importance of a portion of a region, relative to every other place in that region

- Each location is assessed for biological values , level of threat, competing multiple uses
 - Assessed under current, and forecasted future conditions



How represent current diversity? How represent future diversity? How well complement existing conservation? Connectivity value? Current threat? Future threat? Other uses, other values?

Regional assessment requires regional data

- Conservation planning occurs at multiple scales and local datasets and projects can validate and refine regional assessments
 - A regional project must have at least coarse filter coverage of the entire region
 - Biological data (and/or surrogates)
 - Threats data (current and future)
 - Multiple, competing uses

Much region-scale data already exists as subsets of national and global datasets

- Assess for regional application
 - Grain size/resolution
 - Time lags
 - Applicability to region
 - Concordance with neighboring regions
 - Confidence in methodology
 - Integration into conservation planning framework

Many local projects also exist

within region or portions of region

- Local projects are finer-grain
 - Can validate and refine region models
 - Can be assessed for common themes and "scaled up"
 - Can "scale down" regional assessments to local actions

Data needs assessment identifies existing data, gaps that can be filled, and compiles databases for regional use

Tasks of App LCC data needs

assessment

- 1: Evaluate ~31 datasets for relevance and level of quality for App LCC conservation planning (April 30)
- 2: Assemble relevant data in geodatabase, representing App LCC region (May 31)
- 3: Define those conservation planning goals that can be met with available, relevant data, and with what software tools (July 31)
- 4: What data gaps need to be filled to meet critical conservation planning goals (August 31)
- 5: Provide interpretive text and graphics of conservation planning data and tools for App LCC website (Sept 30)
- 6: Develop systematic framework that integrates existing conservation planning work by App LCC cooperators (Jan 31)

Sample result for Task 1

- NatureServe Terrestrial Ecological Systems:
 - Current web location: <u>http://www.natureserve.org/getData/USecologyData.jsp</u>
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- Coverage of Appalachian LCC: 100%
- Data type: Raster
- Grain: 30 meter (Good)
- Spatial reference of downloads: Albers Equal Area Conic, NAD-83, Linear units in meters.
- Quality of data: Good
- Age Ongoing system, development began in the mid 1990's.
- Accuracy Raster data used NLCD 2000
- Completeness Ongoing
- 7. Documentation Good
- 8. Quote: "NatureServe has developed a mid-scale ecological classification for uplands and wetlands, useful for conservation and environmental planning. Terrestrial Ecological Systems represent recurring groups of plant communities that are found in similar physical environments and are influenced by similar dynamic ecological processes, such as fire or flooding. Our classification describes over 800 upland and wetland ecological system types found in the United States, and in adjacent portions of Mexico and Canada. "
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- 9. Notes: The mapped data covers the entire Appalachian LCC area and can be modified into coarser groups.
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- 10. Rank: 1

App LCC data needs assessment personnel

- Mr. Don Lipscomb, Clemson University
 - Task 1-2, collaboration 3-5
 - 30 years experience forest management, GIS database development, T&E species
- Dr. Trishna Dutta, Clemson University
 - Task 6, collaboration 3-5
 - Background in conserving large carnivores in areas with complex jurisdictional oversight
- Dr. Rob Baldwin, Clemson University
 - Project management, communications