

UPDATE ON TERRESTRIAL ECOLOGICAL CLASSIFICATION IN THE HIGHLANDS OF WEST VIRGINIA

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The West Virginia Natural Heritage Program (WVNHP) maintains databases on the biological diversity of the state, including species and natural communities, to help focus conservation efforts by agencies and organizations. Information on terrestrial communities (also called vegetation, or habitat, depending on user or audience focus) is maintained in two databases. The Plots2-WV database now contains standardized vegetation and environmental data from more than 3,000 plots sampled by WVNHP ecologists, contractors, cooperators, and outside contributors. These plot data form the basis for vegetation and ecological system classifications which are applied as conceptual and mapping tools to serve as coarse filters for conservation. The Biotics database contains information on known occurrences of rare species and natural communities and on exemplary occurrences of more common natural communities. Biotics, centrally administered by the nonprofit NatureServe, also relates occurrence information gathered by individual state and provincial programs to provide continent-wide information on taxonomy, distribution, and conservation status of species and natural communities. Both Plots2-WV and Biotics represent cumulative efforts; they are undergoing constant development as new data are collected and entered, as new analyses are performed, and as classification systems are refined and revised.

Attribution of 1,286 West Virginia plots from elevations above 773 m (the state median) to NatureServe's ecological systems provides a broad-scale, low-resolution picture of vegetation patterns in the highlands of the state. Nineteen ecological systems are documented including Allegheny-Cumberland Dry Oak Forest and Woodland, Appalachian (Hemlock)-Northern Hardwood Forest, Appalachian Shale Barrens, Central and Southern Appalachian Montane Oak Forest, Central and Southern Appalachian Spruce-Fir Forest, Central Appalachian Alkaline Glade and Woodland, Central Appalachian Dry Oak-Pine Forest, Central Appalachian Pine-Oak Rocky Woodland, Central Appalachian Stream and Riparian, High Allegheny Wetland, North-Central Appalachian Acidic Cliff and Talus, North-Central Appalachian Circumneutral Cliff and Talus, Northeastern Interior Dry-Mesic Oak Forest, South-Central Interior Large Floodplain, South-Central Interior Mesophytic Forest, South-Central Interior Small Stream and Riparian, Southern and Central Appalachian Cove Forest, Southern Appalachian Grass and Shrub Bald, and Southern Appalachian Oak Forest.

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