CLASSIFICATION AND EVALUATION OF FOREST SITES FOR THE INTERIOR HIGHLANDS

Glendon W. Smalley
Principal Soil Scientist
Silviculture Laboratory
U. S. Forest Service
Sewanee, Tennessee 37375

ABSTRACT

This new comprehensive land stratification system is based on physiography, geology, soils, topography, and vegetation. It is applicable to the Cumberland Plateau and Highland Rim (Pennyroyal) in eastern and southern Kentucky, southwestern Virginia, middle Tennessee, northern Alabama, and northwestern Georgia. The basis for the classification is easily recognized segments of the landscape. The smallest unit in the hierarchial classification is a "landtype." Landtypes differ in productivity and/or degree of limitations and hazards to forest management activities. The system is composed for four parts: 1) landtype descriptions; 2) productivity ratings (site index and mean annual growth in cubic feet); 3) interpretations about plant competition, seedling mortality, equipment limitations, erosion hazards, and windthrow hazards; and 4) species desirability. The system provides a sound biological basis for forest management planning and decision-making. It can easily be incorporated with CFI or other forest inventory systems to obtain information on acreage, composition, and growth of forests by landtypes. Landtypes can be mapped at scales of 1:10,000 to 1:40,000.