

LANDSCAPE ECOSYSTEMS OF GUTHRIE-BANCROFT FARM
APPROXIMATION 2000

Landscape Ecosystem (Geocosystem) Classification,
Green Mountains western slope, lower-slope ice-contact landscape
Colby Hill Ecological Project, Lincoln and Bristol, Vermont
Identified, classified, described and mapped by Marc Lapin

GREEN MOUNTAIN LOWER WEST SLOPE
ICE-CONTACT TERRAIN

ABLATION TILL (ICE-CONTACT DEPOSITS/WASHED TILL)

DEEP MINERAL SOILS--UPLANDS

*Mesic Forests on Level to Steeply Sloping¹, Well Drained to Moderately Well Drained,
Deep, Coarse-Loamy Soils*

"Forests on Deep Soils with Unimpeded Drainage"

South, West and Northwest Aspects on Steep Slopes

1. WELL DRAINED, STEEPLY SLOPING, FINE SANDY LOAM SPODOSOL,
BEECH-MAPLE-RED OAK-SWEET BIRCH FOREST (*Mesic Red Oak-
Hardwood Forest*)² (Berkshire soil series)

Physiography: Lower elevation, steep slopes, south to northwest aspects.

Soils: A horizon 2-10cm brown fine sandy loam, E horizon 0-3cm gray sandy loam, Bs horizon bright orangey-red, deep fine sandy loam.

Vegetation: A diverse tree canopy, including sugar and red maples, beech, white ash, red oak, sweet and yellow birches, hemlock, white pine and red pine. Understory dominated by beech. Small trees include hophornbeam, striped maple and witch-hazel; shrubs include maple-leaved viburnum, hobblebush, and alternate-leaved dogwood. Common herbs include Canada mayflower, Christmas fern, marginal wood-fern, starflower, sessile-leaved bellwort, white wood aster, partridgeberry, New York fern, Indian cucumber-root, stiff clubmoss and pink lady's-slipper.

Comments: The tree and shrub flora indicate the warmer microclimate of the south and west slopes. Red oak is co-dominant with beech and red maple. The co-dominance of red maple is perhaps related to the logging history of the site. The herb species richness and herb coverage are both noticeably less extensive than in the richer, moister ecosystems. The color of the Bs horizon is brighter, more yellow-orange than in other ecosystems. Red pine occurs in a limited area on a steep, south slope; every red pine has been marked by bear scratches.

North and East Aspects, or Slope less than Steep

2. WELL DRAINED, GENTLY TO MODERATELY SLOPING, FINE SANDY
LOAM OVER (STONY) FINE SANDY LOAM SPODOSOL, NORTHERN
HARDWOOD FOREST (*Northern Hardwood Forest*) (Berkshire soil series)

¹ Slope categories: Level 0-2%, Gently sloping 3-8%, Moderately sloping 9-20%, Steeply sloping 21-40%, Very steeply sloping 41-80%

² Parenthetical names in italics are the nearest equivalent natural community as described in Thompson, E and E. Sorenson. 2000. Wetland Woodland, Wildland: Natural communities of Vermont. TNC (VT chapter) and VT Department of Fish and Wildlife, Waterbury, VT.