

Major Land Resource Area 116A

Ozark Highland

Accessed: 05/11/2025

Description

The Ozark Highland constitutes the Salem Plateau of the Ozark Uplift. Elevation ranges from about 300 feet on the southeast edge of the Ozark escarpment, to about 1,600 feet in the west, adjacent to the Burlington Escarpment of the Springfield Plateau. The underlying bedrock is mainly horizontally bedded Ordovician-aged dolomites and sandstones that dip gently away from the uplift apex in southeast Missouri. Cambrian dolomites are exposed on deeply dissected hillslopes. In some places, Pennsylvanian and Mississippian sediments overlie the plateau. Relief varies, from the gently rolling central plateau areas to deeply dissected hillslopes associated with drainageways such as the Buffalo, Current, Eleven Point and White Rivers.

Ecological site keys

MLRA 116A

I. Upland Summits, Shoulders or Backslopes

A. Bedrock <20"

1 Steep slopes dominant (upper slope range to 70%)

- i. DOLOMITE PROTECTED CLIFF N, E aspects ... R116AY014MO – Dolomite Protected Cliff
- ii. DOLOMITE EXPOSED CLIFF S, W aspects ... R116AY017MO – Dolomite Exposed Cliff

2 Steep slopes minor

- i. SHALLOW DOLOMITE UPLAND GLADE/WOODLAND Dolomite residuum ... R116AY020MO – Shallow Dolomite Upland Glade/Woodland
- ii. SHALLOW SANDSTONE UPLAND GLADE/WOODLAND Sandstone residuum ... R116AY027MO – Shallow Sandstone Upland Glade/Woodland

B. Bedrock >20"

1 Mollisol or Mollic Subgroup

- i. >12" loess
 - a. CLAYPAN SUMMIT PRAIRIE Fragipan or claypan ... R116AY001MO – Claypan Summit Prairie
 - b. LOAMY UPLAND PRAIRIE No root restriction ... R116AY006MO – Loamy Upland Prairie
- ii. <12" loess
 - a. <15% slope
 - 1) CALCAREOUS DOLOMITE UPLAND WOODLAND Bedrock 20-40" ... F116AY009MO – Calcareous Dolomite Upland Woodland
 - 2) CHERT UPLAND SAVANNA Bedrock >40" ... R116AY063MO – Chert Upland Savanna
 - b. >15% slope
 - 1) CALCAREOUS DOLOMITE PROTECTED BACKSLOPE FOREST N, E aspects ... F116AY010MO – Calcareous Dolomite Protected Backslope Forest
 - 2) CALCAREOUS DOLOMITE EXPOSED BACKSLOPE WOODLAND S, W aspects ... F116AY047MO – Calcareous Dolomite Exposed Backslope Woodland

2 Alfisol or Ultisol (not in Mollic subgroup)

- i. <15% slope
 - a. >12" loess

- 1) Fragipan or claypan
 - a) FRAGIPAN UPLAND FLATWOODS SWP Drained ... F116AY066MO – Fragipan Upland Flatwoods
 - b) FRAGIPAN UPLAND WOODLAND MW Drained ... F116AY004MO – Fragipan Upland Woodland
- 2) No root restriction
 - a) LOW-BASE LOAMY UPLAND WOODLAND Ultic ... F116AY007MO – Low-Base Loamy Upland Woodland
 - b) LOAMY UPLAND WOODLAND Alfic ... F116AY008MO – Loamy Upland Woodland
- b. <12" loess
 - 1) CHERT MUDSTONE UPLAND WOODLAND Cherty mudstone residuum ... F116AY003MO – Chert Mudstone Upland Woodland
 - 2) LOAMY DOLOMITE UPLAND WOODLAND Dolomite residuum ... F116AY018MO – Loamy Dolomite Upland Woodland
 - 3) Cherty dolomite residuum
 - a) Alfisol
 - (1) CHERT DOLOMITE UPLAND WOODLAND Bedrock 20-40" ... F116AY044MO – Chert Dolomite Upland Woodland
 - (2) CHERT UPLAND WOODLAND Bedrock >40" ... F116AY011MO – Chert Upland Woodland
 - b) LOW-BASE CHERT UPLAND WOODLAND Ultisol ... F116AY012MO – Low-Base Chert Upland Woodland
 - 4) LOW-BASE SANDSTONE UPLAND WOODLAND Sandstone residuum ... F116AY023MO – Low-Base Sandstone Upland Woodland
- ii. >15% slope
 - a. Cherty dolomite residuum, or cherty slope alluvium
 - 1) >12" loess
 - a) LOAMY PROTECTED BACKSLOPE FOREST N, E aspects ... F116AY030MO – Loamy Protected Backslope Forest
 - b) LOAMY EXPOSED BACKSLOPE WOODLAND S, W aspects ... F116AY046MO – Loamy Exposed Backslope Woodland
 - 2) <12" loess
 - a) Alfisol
 - (1) Bedrock 20-40"
 - (a) Thin loess
 - (1) LOAMY DOLOMITE PROTECTED BACKSLOPE FOREST N, E aspects ... F116AY019MO – Loamy Dolomite Protected Backslope Forest
 - (2) LOAMY DOLOMITE EXPOSED BACKSLOPE WOODLAND S, W aspects ... F116AY051MO – Loamy Dolomite Exposed Backslope Woodland
 - (b) No loess
 - (1) CHERT DOLOMITE PROTECTED BACKSLOPE FOREST N, E aspects ... F116AY016MO – Chert Dolomite Protected Backslope Forest
 - (2) CHERT DOLOMITE EXPOSED BACKSLOPE WOODLAND S, W aspects ... F116AY048MO – Chert Dolomite Exposed Backslope Woodland
 - (2) Bedrock >40"
 - (a) CHERT PROTECTED BACKSLOPE FOREST N, E aspects ... F116AY002MO – Chert Protected Backslope Forest
 - (b) CHERT EXPOSED BACKSLOPE WOODLAND S, W aspects ... F116AY062MO – Chert Exposed Backslope Woodland

b) Ultisol

- (1) LOW-BASE CHERT PROTECTED BACKSLOPE WOODLAND N, E aspects ...
F116AY013MO – Low-Base Chert Protected Backslope Woodland
- (2) LOW-BASE CHERT EXPOSED BACKSLOPE WOODLAND S, W aspects ...
F116AY049MO – Low-Base Chert Exposed Backslope Woodland

b. Sandstone residuum

- 1) LOW-BASE SANDSTONE PROTECTED BACKSLOPE WOODLAND N, E aspects ...
F116AY045MO – Low-Base Sandstone Protected Backslope Woodland
- 2) LOW-BASE SANDSTONE EXPOSED BACKSLOPE WOODLAND S, W aspects ...
F116AY053MO – Low-Base Sandstone Exposed Backslope Woodland

c. TALUS FOOTSLOPE FOREST Colluvium ... F116AY022MO – Talus Footslope Forest

II. Upland Drainageways

- A. WET UPLAND DRAINAGEWAY PRAIRIE Historic Prairie (GLO) ... R116AY026MO – Wet Upland Drainageway Prairie
- B. Historic Forest (GLO)
 - 1 WET UPLAND DRAINAGEWAY FOREST SWP, P Drained ... F116AY036MO – Wet Upland Drainageway Forest
 - 2 GRAVELLY/LOAMY UPLAND DRAINAGEWAY FOREST MW, W Drained ... F116AY037MO – Gravelly/Loamy Upland Drainageway Forest

III. Sinkholes

- A. LOAMY SINKHOLE WOODLAND Well drained ... F116AY043MO – Loamy Sinkhole Woodland
- B. PONDED SINKHOLE WETLAND Somewhat Poorly Drained ... R116AY029MO – Pondered Sinkhole Wetland

IV. Footslopes & High Terraces

- A. WET FOOTSLOPE SAVANNA Mollic ... R116AY005MO – Wet Footslope Savanna
- B. Alfic & Ultic
 - 1 WET FOOTSLOPE FOREST SWP, P Drained ... F116AY033MO – Wet Footslope Forest
 - 2 MW, W Drained
 - i. DRY FOOTSLOPE FOREST Low AWC (skeletal, or fragipan) ... F116AY031MO – Dry Footslope Forest
 - ii. LOAMY FOOTSLOPE FOREST High AWC (loamy or clayey) ... F116AY032MO – Loamy Footslope Forest

V. Terraces, Floodplain Steps

- A. Argillic horizon
 - 1 WET TERRACE FOREST Poorly to SWP Drained ... F116AY035MO – Wet Terrace Forest
 - 2 LOAMY TERRACE FOREST MW to Well Drained ... F116AY034MO – Loamy Terrace Forest
- B. No argillic horizon
 - 1 WET FLOODPLAIN STEP FOREST Poorly to SWP Drained ... F116AY040MO – Wet Floodplain Step Forest
 - 2 LOAMY FLOODPLAIN STEP FOREST MW to Well Drained ... F116AY039MO – Loamy Floodplain Step Forest

VI. Low Floodplains

- A. SANDY/GRAVELLY FLOODPLAIN FOREST Low AWC (skeletal, sandy, coarse-loamy) ... F116AY042MO – Sandy/Gravelly Floodplain Forest
- B. LOAMY FLOODPLAIN FOREST High AWC (fine-loamy, fine-silty) ... F116AY041MO – Loamy Floodplain Forest