

# Major Land Resource Area 116A

## Ozark Highland

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### 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

#### ES key for MLRA 116A

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- 1a. Upland Summits, Shoulders or Backslopes [NOT Upland Drainageways, Sinkholes, Footslopes & High Terraces, Terraces & Floodplain Steps, or Low Floodplains]
  - 2a. Bedrock <20”
    - 3a. Cliffs dominant (upper slope range to 70%)
      - 4a. North, East aspects ... R116AY014MO – Dolomite Protected Cliff
      - 4b. South, West aspects ... R116AY017MO – Dolomite Exposed Cliff
    - 3b. Cliffs minor
      - 5a. Dolomite residuum
        - 6a. Smaller, isolated acreage primarily in eastern portion of MLRA primarily on Gasconade and Eminence-Potosi dolomite formations ...  
R116AY020MO – Shallow Dolomite Upland Glade/Woodland
        - 6b. Larger, continuous acreage on Jefferson City-Cotter dolomite formation geology, located primarily in the White River Hills Subsection ...  
R116AY021MO – Bald Knob Dolomite Glade
      - 5b. Sandstone residuum ... R116AY027MO – Shallow Sandstone Upland Glade/Woodland

2b. Bedrock >20"

7a. Mollisols or Mollic Subgroups

8a. >12" loess

9a. Fragipan or claypan ... R116AY001MO – Claypan Summit Prairie

9b. No root restriction ... R116AY006MO – Loamy Upland Prairie

8b. <12" loess

10a. <15% slope

11a. Bedrock 20-40" ... F116AY009MO – Calcareous Dolomite Upland Woodland

11b. Bedrock 40" ... R116AY063MO – Chert Upland Savanna

10b. >15% slope

12a. North, East aspects ... F116AY010MO – Calcareous Dolomite Protected Backslope Forest

12b. South, West aspects ... F116AY047MO – Calcareous Dolomite Exposed Backslope Woodland

7b. Alfisols or Ultisols, not in Mollic subgroups

13a. <15% slope

14a. >12" loess

15a. Fragipan or claypan

16a. Somewhat Poorly Drained ... F116AY066MO – Fragipan Upland Flatwoods

16b. Moderately Well Drained ... F116AY004MO – Fragipan Upland Woodland

15b. No root restriction

17a. Ultic ... F116AY007MO – Low-Base Loamy Upland Woodland

17b. Alfic ... F116AY008MO – Loamy Upland Woodland

14b. <12" loess

18a. Cherty Mudstone residuum or sandstone residuum

19a. Cherty mudstone residuum ... F116AY003MO – Chert Mudstone Upland Woodland

19b. Sandstone residuum ... F116AY023MO – Low-Base Sandstone Upland Woodland

18b. Dolomite residuum or cherty dolomite residuum

20a. Dolomite residuum ... F116AY018MO – Loamy Dolomite Upland Woodland

20b. Cherty dolomite residuum

21a. Alfisols

22a. Bedrock 20-40" ... F116AY044MO – Chert Dolomite Upland Woodland

22b. Bedrock >40"; none ... F116AY011MO – Chert Upland Woodland

21b. Ultisols

49a. Shortleaf Pine able to regenerate naturally ... F116AY090MO – Low-Base Chert Upland Pine Woodland

49b. Shortleaf Pine not able to regenerate naturally (outside of natural range of Shortleaf Pine) ... F116AY012MO – Low-Base Chert Upland Woodland

13b. >15% slope

23a. Residuum

24a. Cherty dolomite residuum, or cherty slope alluvium

25a. >12" loess

26a. North, East aspects ... F116AY030MO – Loamy Protected Backslope Forest

26b. South, West aspects ... F116AY046MO – Loamy Exposed Backslope Woodland

25b. <12" loess

27a. Alfisols

28a. Bedrock 20-40"

29a. Thin loess

30a. North, East aspects ... F116AY019MO – Loamy Dolomite Protected Backslope Forest

30b. South, West aspects ... F116AY051MO – Loamy Dolomite Exposed Backslope Woodland

29b. No loess

31a. North, East aspects ... F116AY016MO – Chert Dolomite Protected Backslope Forest

31b. South, West aspects ... F116AY048MO – Chert Dolomite Exposed Backslope Woodland

28b. Bedrock >40"; none

32a. North, East aspects ... F116AY002MO – Chert Protected Backslope Forest

32b. South, West aspects ... F116AY062MO – Chert Exposed Backslope Woodland

27a. Ultisols

33a. North, East aspects ... F116AY013MO – Low-Base

Chert Protected Backslope Woodland

33b. South, West aspects ... F116AY049MO – Low-Base

Chert Exposed Backslope Woodland

24b. Sandstone residuum

34a. North, East aspects ... F116AY045MO – Low-Base Sandstone  
Protected Backslope Woodland

34b. South, West aspects ... F116AY053MO – Low-Base  
Sandstone Exposed Backslope Woodland

23b. Colluvium ... F116AY022MO – Talus Foothlope Forest

1b. Upland Drainageways, Sinkholes, Foothslopes & High Terraces, Terraces & Floodplain  
Steps, or Low Floodplains

35a. Fens or Upland Drainageways [NOT Sinkholes, Foothslopes & High Terraces,  
Terraces & Floodplain Steps, or Low Floodplains]

36a. Historic Prairie ... R116AY026MO – Wet Upland Drainageway Prairie

36b. Historic Forest

37a. Somewhat Poorly, Poorly Drained ... F116AY036MO – Wet Upland  
Drainageway Forest

37b. Moderately Well, Well Drained ... F116AY037MO – Gravelly/Loamy  
Upland Drainageway Forest

36c. Fen landform or very poorly drained soils with mucky surface associated with  
spring discharge, occurring on multiple landforms. ... R116AY100MO – Karst Fen

35b. Sinkholes, Foothslopes & High Terraces, Terraces & Floodplain Steps, or Low  
Floodplains

38a. Sinkholes [NOT Foothslopes & High Terraces, Terraces & Floodplain Steps, or  
Low Floodplains]

39a. Well Drained ... F116AY043MO – Loamy Sinkhole Woodland

39b. Somewhat Poorly Drained ... R116AY029MO – Poned Sinkhole Wetland

38b. Foothslopes & High Terraces, Terraces & Floodplain Steps, or Low Floodplains

40a. Foothslopes & High Terraces [NOT Terraces & Floodplain Steps, or Low  
Floodplains]

41a. Mollic ... R116AY005MO – Wet Foothslope Savanna

41b. Alfic & Ultic

42a. Somewhat Poorly, Poorly Drained ... F116AY035MO – Wet  
Terrace Forest

42b. Moderately Well, Well Drained

43a. Low Available Water Capacity (skeletal or fragipan) ...  
F116AY031MO – Dry Foothslope Forest

43b. High Available Water Capacity (loamy or clayey) ...

F116AY032MO – Loamy Footslope Forest

40b. Terraces & Floodplain Steps, or Low Floodplains

44a. Terraces, Floodplain Steps

45a. Argillic horizon

46a. Poorly to Somewhat Poorly Drained ... F116AY033MO – Wet Footslope Forest

46b. Moderately Well to Well Drained ... F116AY034MO – Loamy Terrace Forest

45a. No argillic horizon

47a. Poorly to Somewhat Poorly Drained ... F116AY040MO – Wet Floodplain Step Forest

47b. Moderately Well to Well Drained ... F116AY039MO – Loamy Floodplain Step Forest

44b. Low Floodplains

48a. Low Available Water Capacity (skeletal, sandy, coarse loamy) ... F116AY042MO – Sandy/Gravelly Floodplain Forest

48b. High Available Water Capacity (fine loamy, fine silty) ... F116AY041MO – Loamy Floodplain Forest