

Major Land Resource Area 107X Iowa and Missouri Deep Loess Hills

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Ecological site keys

MLRA 107A Key to Provisional Ecological Sites

I. Uplands

A. Summits, Shoulder & Backslopes

- 1 Loess ... R107XA201IA – Loess Upland Prairie
- 2 Calcareous till
 - i. Slopes $\leq 20\%$... R107XA202IA – Calcareous Till Upland Prairie
 - ii. Slopes $\geq 20\%$
 - a. South and West aspects ... R107XA203IA – Calcareous Till Exposed Backslope Prairie
 - b. North and East aspects ... R107XA204IA – Calcareous Till Protected Backslope Savanna
- 3 Loamy sediments ... R107XA205IA – Loamy Sediment Upland Prairie
- 4 Outwash (including ≤ 40 inches (100 cm) loess over outwash) ... R107XA206IA – Outwash Upland Prairie
- 5 Eolian sands ... R107XA207IA – Sandy Dry Prairie

B. Upland Flats & Depressions, slopes 0-2%

- 1 Ponded ... R107XA208IA – Ponded Upland Depression Sedge Meadow
- 2 Not ponded
 - i. Drainageway ... R107XA210IA – Wet Upland Drainageway Prairie
 - ii. not as above ... R107XA209IA – Wet Upland Sedge Meadow

II. Not as above

A. Valley footslope, colluvial parent material ... R107XA211IA – Footslope Prairie

B. Stream terrace ... R107XA212IA – Stream Terrace Prairie

C. Floodplain

- 1 Frequently flooded, depth to water table > 18 inches (45 cm), and located within the Little Sioux River floodplain ... F107XA213IA – Loamy Floodplain Forest
- 2 Not as above
 - i. Deep to water table (≥ 30 cm), Somewhat Poorly to Moderately Well drained ... R107XA214IA – Loamy Floodplain Prairie
 - ii. Shallow to water table (< 12 inches (30 cm)), Poorly to Very Poorly drained ... R107XA215IA – Wet Floodplain Sedge Meadow

MLRA 107B Key to Provisional Ecological Sites

I. Sites located on an upland on a summit, shoulder, or backslope

A. Loess parent material

- 1 Carbonates at or near the surface
 - i. Slopes ≤ 15 percent ... R107XB012MO – Calcareous Loess Upland Prairie

- ii. Slopes ≥ 15 percent
 - a. North and East Aspects ... R107XB013MO – Calcareous Loess Protected Backslope Savanna
 - b. South and West Aspects ... R107XB006MO – Calcareous Loess Exposed Backslope Prairie
 - 2 Carbonates below cambic
 - i. Slopes $< 15\%$... F107XB009MO – Calcareous Loess Upland Woodland
 - ii. Slopes $> 15\%$
 - a. North and East Aspects ... F107XB010MO – Calcareous Loess Protected Backslope Forest
 - b. South and West Aspects ... F107XB011MO – Calcareous Loess Exposed Backslope Woodland
 - 3 No Carbonates
 - i. Lower Clay ($<30\%$)
 - a. Slopes $< 15\%$... R107XB002MO – Deep Loess Upland Prairie
 - b. Slopes $> 15\%$
 - 1 North and East Aspects ... F107XB004MO – Deep Loess Protected Backslope Woodland
 - 2 South and West Aspects ... R107XB003MO – Deep Loess Exposed Backslope Savanna
 - ii. Higher Clay ($>30\%$)
 - a. All slopes ... R107XB007MO – Loess Upland Prairie
 - B. Till parent material
 - 1 Carbonates at/near surface
 - i. All slopes ... R107XB027IA – Calcareous Till Upland Prairie
 - C. Sands parent material ... R107XB030IA – Sandy Dune Prairie
- II. Sites located on an upland on a depression, drainageways, or footslope
- A. Loess
 - 1 Depression ... R107XB022IA – Wet Upland Depression Prairie
 - 2 Drainageway ... R107XB024IA – Wet Upland Drainageway Prairie
 - 3 Footslope ... R107XB008MO – Loamy Footslope Savanna
 - B. Skeletal
 - 1 Footslope ... F107XB005MO – Talus Footslope Forest
- III. Sites located on a lowland on a stream terrace or floodplain
- A. Stream Terrace
 - 1 Moderately Well to Well drained ... R107XB020MO – Loamy Terrace Savanna
 - 2 Somewhat Poorly to Poorly drained
 - i. Clayey soils with silty clay loam, silty clay or clay surface textures ... R107XB021MO – Wet Terrace Savanna
 - ii. Loamy soils with silt loam surface texture ... R107XB014MO – Wet Loess High Terrace Savanna
 - B. Floodplain
 - 1 Ponded ... R107XB018MO – Ponded Floodplain Marsh
 - 2 Not Ponded
 - i. Adjacent to stream channel
 - a. Sandy, coarse-loamy ... F107XB015MO – Sandy/Loamy Floodplain Forest
 - b. Loamy, fine-loamy, fine-silty ... F107XB016MO – Loamy Floodplain Forest
 - c. Clayey ... F107XB017MO – Clayey Floodplain Forest
 - ii. Not adjacent to stream channel
 - a. Moderately Well drained, Loamy ... R107XB025IA – Loamy Floodplain Prairie
 - b. Somewhat Poorly to Poorly, Clayey ... R107XB019MO – Wet Floodplain Prairie
 - c. Somewhat Poorly, Coarse-silty, Fine-silty ... F107XB026MO – Wet Floodplain Woodland

d. Salt/gypsum ... R107XB023IA – Natric Floodplain Prairie