

## Ecological Reference Worksheet

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**Date:** 12/07/04 **MLRA:** 102A **Ecological Site:** Shallow Clay This *must* be verified based on soils and climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

<b>Indicators.</b> For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above- and below-average years for <u>each</u> community within the reference state, when appropriate, and (3) site data. Continue descriptions on separate sheet.	<b>Indicator Weight</b>
<b>1. Number and extent of rills:</b> Rills should not be present.	1
<b>2. Presence of water flow patterns:</b> Typically not observable, but sometimes present after heavy storms.	1
<b>3. Number and height of erosional pedestals or terracettes:</b> Some slight pedestalling of bunch grasses.	1
<b>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, and plant canopy are <i>not</i> bare ground):</b> Bare ground less than 10 percent and less than 2 inches in diameter.	1
<b>5. Number of gullies and erosion associated with gullies:</b> Active gullies should not be present.	1
<b>6. Extent of wind scoured, blowouts, and/or depositional areas:</b> None.	1
<b>7. Amount of litter movement (describe size and distance expected to travel):</b> Little to no plant litter movement. Some accumulations (small litter dams) may be present after storm events.	1
<b>8. Soil surface (top few mm) resistance to erosion (stability values are averages – most sites will show a range of values for both plant canopy and interspaces, if different):</b> Stability class usually 5-6. Typically high root content, organic matter, and granular structure. Soil surface is resistant to erosion.	1
<b>9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different):</b> Use soil series description for depth and color of A-horizon.	1
<b>10. Effect of plant community composition (relative proportion of different functional groups) and spatial distribution on infiltration, and runoff:</b> Healthy, deep rooted native grasses enhance infiltration and reduce runoff.	2
<b>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):</b> No compaction layer should be evident.	1
<b>12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: &gt;&gt;, &gt;, = to indicate much greater than, greater than, and equal to):</b> Mid-warm-season bunch grass > mid cool-season rhizomatous grass > tall cool-season bunch grass > tall warm-season rhizomatous grass > mid-warm-season rhizomatous = short warm-season grass = short cool-season grass > shrub > forb = tree.	2
<b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):</b> Very little to no evidence of decadence or mortality.	1
<b>14. Average percent litter cover.</b> 70-80 percent roughly 0.5 inches thick or less. Litter cover is in contact with soil surface.	1
<b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b> 2,200–3,000 lbs./acre air-dry weight, average 2,600 lbs./acre air-dry weight.	1
<b>16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, “can, and often do, continue to increase regardless of the management of the site and may eventually dominate the site.”</b> Refer to State and Local Noxious Weed List, also Kentucky bluegrass, smooth brome grass.	2
<b>17. Perennial plant reproductive capability:</b> All species are capable of reproducing.	1