

**Ecological Reference Worksheet\***

**Author(s)/participant(s):** Bruce Call, Willard Hall, Phil Smith, Bud Starnes, Sheila Richmond, Lane Hauser

**Contact for lead author:** Phil Smith      **Reference site used?** No

**Date:** 7 October 2002      **MLRA:** 42      **Ecological Site:** Bottomland      **Applies to** All (write year or AAll@)

<b>Indicators.</b> For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range for poor B good production year and (3) cite data. Continue descriptions on a separate sheet.	<b>ERA Match?</b>
<b>1. Number and extent of rills:</b> There should not be any rills on this site due to the lack of slope and the amount of vegetation.	
<b>2. Presence of water flow patterns:</b> There should not be any water flow patterns on this site, however, this site is periodically inundated (flooded) due to its location on the landscape.	
<b>3. Number and height of erosional pedestals or terracettes:</b> There should not be any pedestals or terracettes on this site due to the lack of slope and the amount of vegetation.	
<b>4. Bare ground from Ecological Site Description (ESD) or other studies:</b> Bare ground can make up to 10% of the ground cover on this site according to the ESD. Bare patch size can be to 1 foot in diameter due to the amount of vegetation.	
<b>5. Number of gullies and erosion associated with gullies:</b> There should not be any gullies or erosion associated with gullies on this site due to lack of slope and the amount of vegetation.	
<b>6. Extent of wind scoured, blowouts and/or depositional areas:</b> There should not be any wind scoured, blowouts or depositional areas on this site due to the amount of vegetation.	
<b>7. Amount of litter movement (describe size and distance expected to travel):</b> Most of the litter movement on this site is should be litter that has been transported onto the site from adjacent sites. Litter produced on this site stays on the site and only travels short distances.	
<b>8. Soil surface (top few mm) resistance to erosion (stability values are averages B most sites will show a range of values):</b> The soil surface for this site is should be resistant to erosion (stability values approximately 4-6).	
<b>9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness):</b> Using the Mimbres soil series in Dona Ana County the A horizon is 0-7 inches deep and is a silt loam. Its structure is a moderate medium subangular blocky. Its color is light brown (7.5 YR. 5-6/4) and the SOM is less than 1%. Potential for this site can vary with different soil series.	
<b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b> Infiltration rates for this site are naturally slow according to the ESD. This site collects runoff from surrounding areas instead of producing runoff.	
<b>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):</b> There should not be any compaction layers on this site.	
<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> Dropseeds (alkali sacaton, big sacaton, giant dropseed) > vine mesquite = other grasses > shrubs = forbs	
<b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):</b> The centers of grass such as dropseeds and bunchgrasses can show decadence.	
<b>14. Expected litter amount: Average 35% cover and 2.0 inch deep.</b> Values are from the ESD.	
<b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b> The amount of annual production for this site should be approximately 1800 lbs/acre in unfavorable precipitation years and 3500 lbs/acres in favorable precipitation years. Values are from the ESD.	
<b>16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, Awill continue to increase regardless of the management of the site@ and may eventually dominate the site:</b> Mesquite and tarbush can be invasive to this site.	
<b>17. Perennial plant reproductive capability:</b> The dropseeds (sacatons) and vine mesquite reproduce vegetatively and by seed.	

\*This sheet can also be used to describe Ecological Reference Areas (ERA=s). For ERA=s, you must also complete the following page and describe status of each indicator. In the far right column, write AYes@ (ERA matches expected for site) or ANo@ (ERA does not match expected for the site). Where the answer is ANo@, explain difference in comments.