

**Ecological Reference Worksheet\***

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

**Date:** 24 October 2002      **MLRA:** 42      **Ecological Site:** Gyp Upland      **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 can be a few, short and discontinuous rills on this site.	
<b>2. Presence of water flow patterns:</b> There can be a few, short and discontinuous water flow patterns	
<b>3. Number and height of erosional pedestals or terracettes:</b> There can be a few pedestals and terracettes that are generally less than 1 inch in height.	
<b>4. Bare ground from Ecological Site Description or other studies:</b> Bare ground can make up to 46% of the ground cover according to the ESD for this site. Bare patches greater than 1 foot in diameter can be common.	
<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.	
<b>6. Extent of wind scoured, blowouts and/or depositional areas:</b> There should not be any wind scoured, blowouts and/or depositional areas.	
<b>7. Amount of litter movement (describe size and distance expected to travel):</b> Litter size should be small (< 0.25" diameter) and may move distances less than 2 feet.	
<b>8. Soil surface (top few mm) resistance to erosion (stability values are averages B most sites will show a range of values):</b> Soil surface stability values to be reported by Jeff Herrick et. al.	
<b>9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness):</b> For the Holloman Series in Otero County this very fine sandy loam should have an A horizon 0-3 inches thick. It should also have a weak medium granular structure and be very pale brown, (10YR 7/3 dry) to pale brown (10YR 6/3 moist). The SOM content in this series should be less than 1%.	
<b>10. Effect of plant community composition (relative proportion of different functional groups) &amp; spatial distribution on infiltration &amp; runoff:</b> The infiltration rates should be highest at the bases of plants due to their roots and the soil building processes occurring there. Jeff Herrick will report actual infiltration data for Holloman series.	
<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 compactions layers for 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> BOER4 = BOBR = SPAI > Other perennial grasses (including gyp dropseed) > Coldenia > Shrubs (Saltbush, Ephedra) = Forbs	
<b>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):</b> Alkali sacaton can show decadence in plant centers. Gyp grama and gyp dropseed can persist through dry periods. Black grama, however, may exhibit substantial mortality during drought. Coldenia can also tolerant of drought.	
<b>14. Expected litter amount: Average 16% cover and 0.4 inch deep.</b> (As per ESD)	
<b>15. Expected annual production (this is TOTAL above-ground production, not just forage production):</b> The annual production for this site in years with unfavorable precipitation should be approximately 200 lbs/acre and 600 lbs/acre in years with favorable precipitation according to 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, will continue to increase regardless of the management of the site@ and may eventually dominate the site:</b> Mesquite could potentially invade this site .	
<b>17. Perennial plant reproductive capability:</b> Black grama , gyp dropseed, and alkali sacaton are highly capable of reproducing vegetatively but reproduction by seed can be infrequent. The habits of other species are unknown on this site.	

\*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.