

Appendix 2.

Ecological Reference Worksheet

Author(s) / participant(s): Don Ashby Jr., D'Llaynn Bruce, Jim Norris, John Hartung, Jerry Sparks
Contact for lead author : Don Ashby Jr. **Reference site used? Yes/No** No
Date: 5/11/2005 **MLRA:** 70 **Ecological Site:** Gyp Hills CP-2 This must be verified based on soils and climate (see Ecological Site Description). Current plant community cannot be used to identify the ecological site.

<p>Indicators: 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 each community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Indicator Weight</p>
<p>1. Number and extent of rills : Rills may be present on this site but should not dominate the site.</p>	
<p>2. Presence of water flow patterns: Water flow patterns may be present on this site due to these soils having low infiltration capacity and may have a large number of natural flow patterns.</p>	
<p>3. Number and height of erosional pedestals or terracettes: None</p>	
<p>4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) : Bare ground may be present up to 40%. Bare patches should be less than 12 inches in diameter.</p>	
<p>5. Number of gullies and erosion associated with gullies: If unprotected by vegetative cover, these soils are highly susceptible to gullies and erosion associated with gullies.</p>	
<p>6. Extent of wind scoured, blowouts and/or depositional areas: Soil blowing hazards can be severe on this site when these soils are unprotected by vegetative cover.</p>	
<p>7. Amount of litter movement (describe size and distance expected to travel) : Fine (plant material) litter movement, 1-3 feet, can occur during high wind occurrences for areas adjacent to gypsum shale and sandstone outcrops.</p>	
<p>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): Anticipated to be 1-2 at the surface and subsurface in the interspaces and 2-3 at the surface and subsurfaces under vegetation.</p>	
<p>9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) : Soils are loams over gypsum, light in color with the A horizon 1-2 inches in depth. These sites are well drained, shallow and very shallow with low permeability. Water-holding capacity is low.</p>	
<p>10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: Grasses and Forbs account for 90% of the annual herbaceous production for this site and make up 20% of the site composition. Infiltration is best with low intensity rainfall events.</p>	
<p>11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): None, soils are shallow and very shallow with gypsum shale and sandstone outcrops common.</p>	
<p>12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) : Warm Season bunch grasses>Warm Season stolon grasses>Forbs(Coldenia)</p>	
<p>13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) : Most of the perennial grasses, forbs, shrubs are long lived. Extended drought periods tend to cause high mortality rates in the grass species, with some mortality in the forbs. Shrub and trees mortality can occur in severe, multiple year droughts.</p>	
<p>14. Average percent litter cover (20 %) and depth (0.8 inches). Percent litter cover on this site will increase with above average year rainfall.</p>	
<p>15. Expected annual production (this is TOTAL above-ground production, not just forage production): 250 lbs/ac low precip. years, 425 lbs/ac in average precip years, 600 lbs/ac in above average years. Grass/Grasslikes make up to 75% of the total annual production.</p>	
<p>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": Juniper has the potential to dominate the site with increased site degradation.</p>	
<p>17. Perennial plant reproductive capability : The only limitations to reproductive capability are weather related and natural disease that result in reduced reproductive capabilities of native herbaceous species. If Juniper species dominate the site it can reduce reproductive capabilities of the native grasses and forbs.</p>	

Photograph (s)

MLRA : 70

Date :

Ecological Site : Gyp Hills CP-2

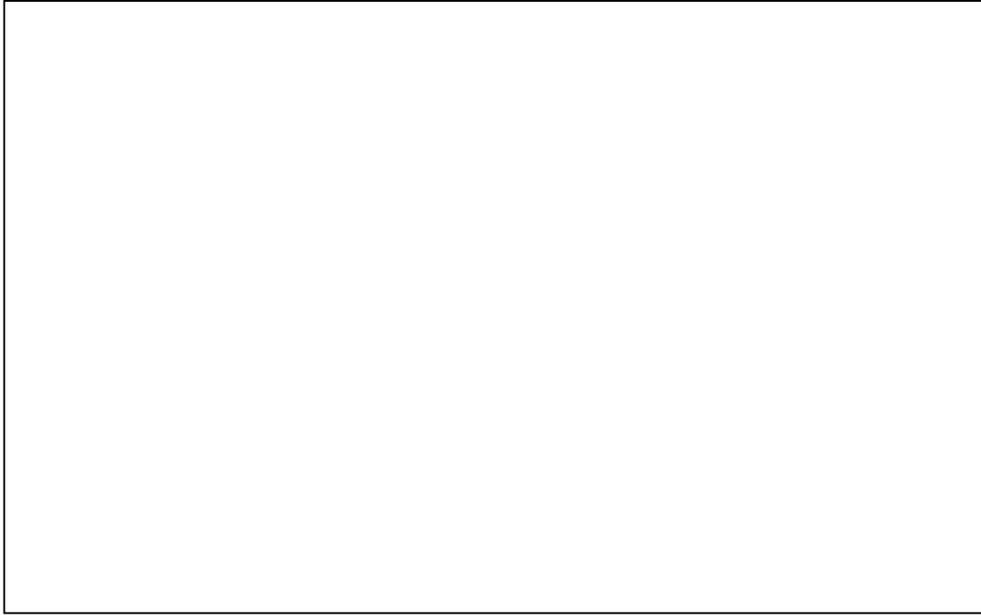


Photo # 1

Comments :

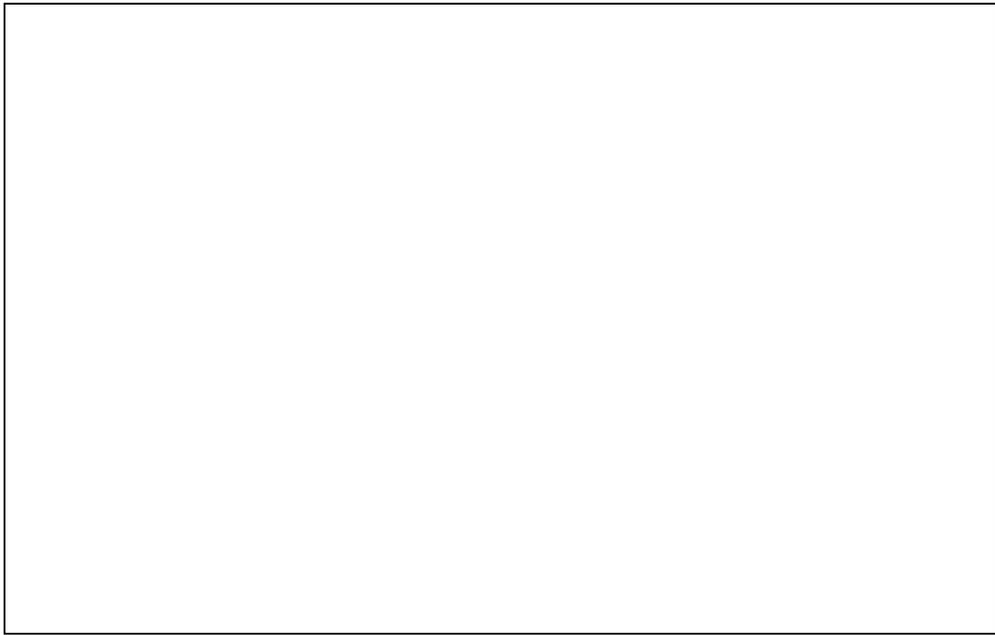


Photo # 2

Comments :

