#3 *(Juniperus arizonica)* / *Gutierrezia sarothrae* - *Dalea formosa* Shrubland Association (P)
(Arizona juniper) / Broom snakeweed - Featherplume Shrubland Association (P)

This shrubland community is characterized by a field stratum (<0.5 m) co-dominated by broom snakeweed (*Gutierrezia sarothrae)* and feather-plume (*Dalea formosa*), with a common associate, Arizona juniper (*Juni-perus arizonica*), in the canopy strata (>2 m) and a substantial perennial grass component with cover approaching 10%. Broom snakeweed (*G. sa-rothrae*) accounts for up to 18% cover in some areas of this shrubland, but averages around 7% throughout. The other co-dominant, featherplume (*D. formosa*), can be as high as 8% of total cover, but is often much more sparse, averaging to only 5%. This shrubland is very open and might best be described as a subshrubland, dominated by short-statured shrubs and

> **Common species**
> - *Gutierrezia sarothrae*
> - *Dalea formosa*
> - *Juniperus arizonica*
> - *Hesperostipa neomexicana*
> - *Bouteloua eriopoda*

forbs, with occasional, widely dispersed large shrubs and trees. Arizona juniper (*J. arizonica*) is present through-out this community, with variable cover ranging from less than 1% to 8%. The field stratum also contains a diverse range of perennial bunchgrasses. The two most consistent and widely distributed of these, New Mexico feathergrass (*Hesperostipa neomexicana*) and black grama (*Bouteloua eriopoda*), provide an average of 3% each. The remaining grasses—sideoats grama (*Bouteloua curtipendula*), purple threeawn (*Aristida purpurea*), and slim tridens (*Tridens mutica*)—are less consistent, with cover values closer to 1%.

This shrubland community is mainly found on low-angle to moderately steep (6–35%) shoulder slopes, back-slopes, and some toeslopes of large mesas at the Well unit. This shrubland community covers 8% (8 ha/21 ac) of the Well unit and only 0.5% (1 ha/3 ac) at the boundary edge of the Castle unit. The surface soils are often exposed, either as scattered bedrock and small rocks, or commonly bare soil and gravel.