

TARGET GRASSLAND AND SHRUBLAND SPECIES

The Service has identified the habitat needs of a diverse group of target upland (grassland and shrubland) species (table 10). Providing for the life history needs of these species will provide the natural upland diversity and conditions needed not only for these targeted species but an even greater variety of upland-associated wildlife. Monitoring will be focused on these target species to determine their response to upland management actions.

GRASSLAND AND SHRUBLAND HABITAT OBJECTIVE

Reduce the presence of invasive species to facilitate the restoration, maintenance, and distribution of native grasslands and shrublands in higher floodplain elevations and terraces and on alluvial fans (over the next 10 years).

Strategies

- Use Service staff and equipment—possibly in combination with cooperative farming—to plant annual grain crops (including glyphosate-tolerant crops) to eliminate invasive species, including the seedbed, and to prepare an area for restoration to native plant species (over 5–10 years).
- As appropriate, keep some fields fallow using repeated disking or chemical applications to continually treat and reduce invasive species. Some fields may also be planted to winter wheat to reduce erosion from wind and runoff.
- Use small tame grassland sites to determine the best methods to restore native plants and shrubs on the refuge both with and without irrigation.
- Continue to implement and evaluate tested techniques for reducing cheatgrass.

Table 10. Target species for the grassland and shrubland areas and their habitat needs.

<i>Habitat</i>	<i>Vegetation height</i>	<i>Vegetation cover</i>	<i>Litter and/or residual cover</i>	<i>Area requirements</i>	<i>Nesting or breeding (after 1991²)</i>	<i>Migration</i>
Western Meadowlark¹						
Open, treeless areas with widely dispersed shrubs	Varies—shortgrass prairie to mixed and tallgrass prairie	Nest sites in grass clumps or next to prickly pear	Abundance is positively correlated with litter depth	5–32 acres depending on vegetation height; more abundant on interior plots >656 feet from edge	X	X
Bobolink¹						
Mixture of grasses and broad-leaved forbs	2–6 inches	Nests beneath the shade of forbs; no nests found where grass is only concealment	Density is higher in areas with low total vegetation cover but with high litter cover (hayfields >8 years old)	2–4 acres depending on habitat quality; on fields >74 acres, there are more than twice the number of males than on fields <25 acres	X	X
Grasshopper Sparrow¹						
Idle grasslands with clumped vegetation interspersed with bare ground.	Intermediate, >4 inches	Bird numbers are positively correlated with percent grass cover (the more cover, then the more birds)	Moderately deep litter and sparse cover of woody vegetation	Average size is <5 acres but prefers 20–74 acres; more abundant on interior plots >656 feet from edge		X
Brewer's Sparrow¹						
Considered a sagebrush-dependent species; moderate shrub cover	2–5 feet	>10% average shrub cover; abundance decreases as shrub cover falls below 10% and over 50%; nests on shrubs 9–75 inches in height	No information	Usually 1–5 acres		X

¹ These species do not currently nest on the refuge in great numbers, but with restoration of these desirable habitat qualities, it may allow them to become reestablished.

² Refuge data.

Sources: Dechant et al. 2002a, 2002b; Martin et al. 1995; MFWP 2005; Montana Bird Distribution Committee 1996; Texas State Parks and Wildlife 2011; Walker 2004.

Abbreviation: X = recorded use on the refuge.