

Mountain Plover Population Inventory and Habitat Management Cimarron and Comanche National Grasslands, 2008

Introduction

During 2008, Mountain plover surveys were conducted on eight prairie dog colonies and four prescribed burns. Mountain plovers may utilize prairie dog colonies during the breeding season. For this reason, a subset of eight prairie dog colonies distributed across the Carrizo Unit of the CNG were surveyed for mountain plovers during May and early June of 2009. These colonies were randomly selected from the list of active colonies in 2007. This is a much smaller survey than those in 2005- 2007, mainly due to a dramatic decline in active prairie dog colonies. Mountain plovers may also utilize prescribed burns for breeding. Four prescribed burns were completed on the Comanche within potential Mountain plover habitat.

Mountain plover population surveys

Burns: During early May and again in early June of 2008, a systematic grid of points was surveyed in each burn with grid points spaced at approximately 0.2 mi intervals (Svingen and Giesen 1999). At each point, the observer would leave the ATV for several seconds to show a human silhouette (to cause any nearby plovers to move off of the nest) and then hop back on and scan with binoculars for 2-3 minutes. In areas with suspected nesting plovers or significant amounts of bare ground, the survey interval was shortened to 0.1 mi in order to more intensively survey the area. Four prescribed burns occurred in potential mountain plover habitat (shortgrass prairie on loamy soils with slope <5%) during early spring of 2008.

Table 1. Burns providing potential nesting habitat for mountain plover on the Grassland.

Allotment	Acres Burned	Grazing Association	Comments
Brown's Reservoir	1400	Timpas	Burrowing owl
Windmill	577	Campo	Curlew nest
Lonestar	411	Campo	8 plovers, 1 curlew, no nests, inactive prairie dog town
Galleta	562	Pritchett	Swift fox

Colonies: During May and early June, prairie dog towns were grid-surveyed in conjunction with burrowing owl, swift fox and Long-billed curlew surveys. A total of eight colonies and approximately 1600 acres was surveyed on the Carrizo Unit of the Comanche NG, but no surveys were conducted on the Timpas Unit. On the Carrizo Unit, the colonies expanded in size dramatically during 2003 - 2005, but most were declining in prairie dog density and distribution in spring of 2006 due to plague. This trend continued in 2007 and 2008.

Table 3. Prairie dog colony surveys on the Carrizo Unit of the Comanche NG, 2008

Allotment	Acres	Plover #/nest	Notes
Vilas Grade	50	0	Burrowing owl
Blow Out	200	0	2 burrowing owl
Packstring	300	0	Mt. plover, burrowing owl, curlew
Vega	50	0	Mt. plover, burrowing owl, curlew
Lonestar	400	0	Mt. plover, burrowing owl, curlew
3 Awn	400	0	Burrowing owl
Liberty	100		Burrowing owl
Buzzard's Roost	100	0	Burrowing owl

Results:

Surveys of the Comanche National Grassland documented no nests of Mountain plovers, but plovers were present on three different black-tailed prairie dog colonies on the Carrizo Unit.

Overall, survey results from 2008 indicate:

- 1) Prescribed burns continue to provide nesting habitat for mountain plovers on the Grasslands, but the density of nesting plovers on burns during 2004 - 2008 is still lower than densities documented on burns during 1998 – 1999 (Svingen and Giesen 1999).
- 2) Plovers continue to be documented on prairie dog colonies on the Comanche NG, but the proportion of colonies with nesting plovers based on the systematic surveys has declined compared to 2004 and 2005. Total acreage of colonies on the Carrizo Unit:

Year	Acres
2009	4581
2008	2542
2007	3014
2006	5786
2005	14387

Literature Cited

Svingen, D. and K. Giesen (1999). Mountain Plover (*Charadrius montanus*) response to prescribed burns on the Comanche National Grassland. Journal of the Colorado Field Ornithologists **33**(4): 208-212.