## **Comanche National Grassland**

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**Location within Domain:** Latitude: 37° 12' 36 N, Longitude: 102° 42' 54 W The CNG is composed of two units in southeastern Colorado, the Timpas Unit in Otero and Las Animas Counties, and the Carrizo Unit in Baca and Las Animas Counties. This site would be located on the Carrizo Unit of the Comanche NG in Baca County.

**History:** In the mid 1930's, many farms and ranches of the western Great Plains were abandoned due to drought, overgrazing and soil blown from plowed fields. Lands purchased by the federal government in southeastern Colorado through the Bankhead-Jones Farm Tenant Act of 1937 eventually resulted in establishment of the Comanche National Grassland. Today, the Comanche National Grassland includes over 180,000 ha in southeastern Colorado.

**Key Characteristics:** Vegetation – The main native plant communities are shortgrass steppe (~55,100 ha of the CNG's Carrizo Unit) and sandsage prairie (~40,500 ha of the CNG's Carrizo Unit). The shortgrass steppe is dominated by warm-season grasses such as blue grama (Bouteloua gracilis), buffalo grass (Buchloe dactyloides), red threeawn (Aristida purpurea) and sideoats grama (Bouteloua curtipendula). Sandsage prairie is characterized by a shrub layer dominated by sand sagebrush (Artemisia filifolia) and herbaceous layer of perennial grasses such as sand dropseed (Sporobolus cryptandrus) and needle-and-thread (Hesperostipa comata). Climate -Typical of mid-continental semiarid temperate zones; this site is located near the center of the area defined as the shortgrass steppe ecosystem by Lauenroth and Milchunas (1991). Mean annual precipitation is ~40 cm. Soils and landforms - The dominant landform is extensive flat plains with moderate erosion dissection. Bedrock is primarily of Paleozoic and Mesozoic marine shale, limestone, and sandstone deposits. Quaternary sand, silt, and gravel are also widespread. Topography is characteristic of the Southern High Plains Section of the Great Plains Physiographic Province. Soil texture (sand content) is the primary factor differentiating sandsage prairie from shortgrass steppe. Elevation ranges 1160-1990m. Administration- USDA/Forest Service.

**Existing Infrastructure:** NOAA has maintained a long-term weather station at the site (located in shortgrass steppe; http://www.met.utah.edu/cgibin/droman/meso\_base.cgi?stn=KSPD) and the Forest Service installed a remote-access weather station (RAWS) in sandsage prairie in 2005 (http://www.met.utah.edu/cgibin/droman/station\_total.cgi?stn=TR598).

**Facilities:** No on-site structures; year around road access.

**Elevation:** 1100-1800