

scanned 4/11/05

GRAVELLY
DESERT SHRUB
RANGE SITE DESCRIPTION

Land Resource Area Trans-Pecos

Location _____

Date January 1, 1972

1. TOPOGRAPHY AND ELEVATION: This site usually occurs as gently sloping to rolling hills and ridges with slopes of 3 to 8 percent. It occurs frequently as outwash soil material below hills and mountains and above valleys. Elevations range from about 2000 feet in the south along the Rio Grande to 4500 feet in the northern part of the zone.
2. SOILS:
 - a. Soils generally are calcareous gravelly loams, shallow, less than 20 inches deep and usually over cemented caliche. Gravel is over 15 percent, usually 1/2 inch to 3 inches in size. A gravelly desert pavement often exists. Infiltration rate is sometimes slowed by surface crusts. Water holding capacity is low, and run-off from intense rains is high. Soil temperatures in summer are high, resulting in excessive evaporation from the soils.
 - b. Some soil taxonomic units which characterize this site are:
 - Agustin gravelly fine sandy loam
 - Delnorte very gravelly loam
 - Nickel gravelly loam
 - Simona gravelly loam
 - Upton gravelly loam
 - Vieja stony silty clay
 - c. Specific site location:
3. CLIMAX VEGETATION:
 - a. Vegetation is dominated by drought tolerant or drought escaping species, typical of the Chihuahuan desert. The climax plant community is predominantly a grassland with an abundance of shrubs on the high spots and more droughty areas and sparsely scattered throughout the rest of the community. Annual forbs are common following repeated rains. Creosotebush is considered to be a dominant shrub of the climax community, but other shrubs, grasses and annuals are also important components.

RELATIVE PERCENTAGE

<u>Grasses</u>	50%	<u>Woody</u>	25%	<u>Forbs</u>	25%
Chino grama	30	Creosotebush	10	Perennial bladderpod	10
Black grama		Catclaw		Desert rue	
Bush muhly		Whitethorn acacia		Gray coldenia	
Slim tridens	10	Wolfberry	5	Rough menodora	10
Rough tridens		Javelinabush		Plains zinnia	
Perennial threeawn		Allthorn		Trailing ratany	
Tobosa	10	Range ratany	5	Cutleaf aplopappus	10
- Sand dropseed		White ratany		Dogweed	
- Mesa dropseed		Fourwing saltbush		Broom snakeweed	
Fluffgrass	10	Guayacan	5	Bahia	5
Spike pappus		Feather dalea		Wildbuckwheat	
Sixweeks grama		Mariola		Wooly paperflower	
Annual threeawn	10	Gregg coldenia	5	Perennial croton	10
Red grama		Ephedra		Desert holly	
Ear muhly		Cacti		Annual forbs	
Burrograss	T	Lechugilla	5		10
- Blue grama		Ocotillo			
- Sideoats grama		Sotol			
- Plains bristlegrass	T	Yucca	5		10
- Arizona cottontop					
Lovegrass tridens					
Whiplash pappusgrass	T		5		10
- Cane bluestem					
Tanglehead					

b. As retrogression occurs, creosotebush increases and dominates, while the grasses decrease, usually with some bush muhly remaining in the shrubs. Bare ground and desert pavement increase.

c. Approximate total annual yield of this site in excellent condition ranges from 100 pounds per acre in poor years to 400 pounds per acre of air-dry herbage in good years.

4. WILDLIFE NATIVE TO THE SITE: Dove and quail may utilize the site with adjacent sites. Mule deer and antelope may occasionally feed on the site seasonally, and javelina are common on the site.

5. GUIDE TO INITIAL STOCKING RATE:

<u>Condition Class</u>	<u>Climax Vegetation</u>	<u>Ac/AU/Yr.L.</u>	<u>AU/Sec/Yr.L.</u>
Excellent	76-100	53-107	6-12
Good	51-75	80-160	4-8
Fair	26-50	107-213	3-6
Poor	0-25	213+	0-3

a. Cattle

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Chino grama	Burrograss	Fluffgrass
Black grama	Red grama	Ear muhly
Blue grama	Bladderpod	Spike pappus
Bush muhly	Desert rue	Annual grasses
Sideoats grama	Trailing ratany	Gray coldenia
Plains bristlegrass	Range ratany	Broom snakeweed
Mesa dropseed	White ratany	Creosotebush
Arizona cottontop	Fourwing saltbush	Catclaw
Sand dropseed	Feather dalea	Javelinabush
Lovegrass tridens	Ephedra	Mariola
Slim & rough tridens		Ocotillo
Whiplash pappusgrass		Lechuguilla
Perennial threeawns		Cacti
Menodora		Sotol

b. Sheep

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Bladderpod	Perennial threeawn	Fluffgrass
Desert rue	Slim & rough tridens	Ear muhly
Menodora	Arizona cottontop	Spike pappus
Trailing ratany	Mesa dropseed	Annual grasses
Chino grama	Sand dropseed	Creosotebush
Bush muhly	Red grama	Javelinabush
Blue grama	Burrograss	Ocotillo
Black grama	Catclaw	Lechuguilla
Sideoats grama	Mariola	Cacti
Plains bristlegrass	Plains zinnia	
Range ratany	Bahia	
White ratany	Croton	
Fourwing saltbush	Broom snakeweed	
Feather dalea	Cutleaf aplopappus	
Some annual forbs		

c. Goats

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Range ratany	Catclaw	Fluffgrass
White ratany	Whitethorn acacia	Spike pappus
Fourwing saltbush	Wolfberry	Sixweeks grama
Feather dalea	Mariola	Burrograss
Ephedra	Chino grama	Ear muhly
Guayacan	Black grama	Perennial threeawns
Menodora	Blue grama	Annual grasses
Desert rue	Slim & rough tridens	Dogweed
Trailing ratany	Sand dropseed	Broom snakeweed
Sideoats grama	Pricklypear	Bahia
Plains bristlegrass		Wooly paperflower
Mesa dropseed		Creosotebush
Bush muhly		Allthorn
		Lechuguilla
		Tasajillo

d. Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Range ratany	Catclaw	Creosotebush
White ratany	Whitethorn acacia	Javelinabush
Fourwing saltbush	Mariola	Allthorn
Guayacan	Wolfberry	Sotol
Ephedra	Pricklypear	Threeawns
Feather dalea	Tasajillo fruits	Burrograss
Lechuguilla	Yucca blooms	Ear muhly
Bladderpod	Ocotillo leaves	Dogweed
Desert rue	Bush muhly	Broom snakeweed
Wildbuckwheat	Blue grama	Wooly paperflower
Trailing ratany	Chino grama	
Some annual forbs		

e. Antelope

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Bladderpod	Range ratany	Creosotebush
Desert rue	Guayacan	Catclaw
Menodora	Mariola	Whitethorn acacia
Plains zinnia	Ephedra	Javelinabush
Trailing ratany	Black grama	Cacti
Wildbuckwheat	Blue grama	Yucca
Feather dalea	Plains bristlegrass	Sotol
Fourwing saltbush		
Some annual forbs		

f. Javelina

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Pricklypear	Perennial grasses	Annual grasses
Lechuguilla	Perennial forbs	Annual forbs
Roots of some shrubs		Creosotebush
Roots of perennial grasses and forbs		Most other woody shrubs
Mast of cacti		
Mast of most woody shrubs		

g. Dove and Quail

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Seed of:	Seed of:	Seed of:
Croton	Dropseeds	Black grama
Bladderpod	Tridens	Blue grama
Menodora	Sideoats grama	Muhlys
Wildbuckwheat	Mast of most other woody shrubs	Threeawns
Mariola		Fluffgrass
Daleas		Burrograss
Catclaw		
Whitethorn acacia		
Plains bristlegrass		

1/ Definitions of terms and an explanation of interpretations is given on a separate page which is attached or submitted with each group of range site descriptions.