USDA, SCS
Section II-E
Technical Guide
Area 27

CLAYEY BOTTOMLAND
RANGE SITE DESCRIPTION
PE 19-44

Land Resource Area RIO GRANDE PLAIN

Location

Date 1/1/72

1. TOPOGRAPHY AND ELEVATION: This site occurs on nearly level low terraces of old floodplains above overflow and on slightly depressed to nearly level areas in active floodplains that receive overflow about twice in every five years. Surfaces are plane or concave with slopes of 1 percent or less.

2. SOILS:

a. The soils are deep, calcareous or neutral clayey soils throughout. The soils crack when dry and have a high shrink-swell potential. The soils are moderately well drained or somewhat poorly drained, runoff is slow or ponded and permeability is slow or very slow. Water holding capacity is high but available water for plant use is medium. Because these are aluvial soils the natural fertility is high. This is a high producing site.

b. Some soil taxonomic units which characterize this site are:

Aransas clay
Grulla clay
Harlingen clay
Kaufman clay

c. Specific site location:

3. CLIMAX VEGETATION:

a. The climax vegetation of this site is a savannah oak,elm, hackberry, cottonwood, anaqua,pecan and other large trees provide about 25 per cent canopy. The overstory is usually denser immediately adjacent to streams. Underbrush includes greenbriar, grapes, and berryvines. The plant community varies due to variations in overflow, overstory and drainage.

RELATIVE PERCENTAGE

Grasses	85%	Woody	10%	Forbs	5%
southwestern bristlegrass		oak sp.		Engleman daisy	
Virginia wildrye	25	elm sp.		sensitive briar	
rustyseed paspalum		pecan		snoutbean	
big cenchrus		vines	10	yellow neptunia	5
little bluestem		spiny aster		western indigo	
switchgrass	35	hackberry		lespedezas	
giant sacaton		woody vines		annual forbs	
four flower trichloris				blood ragweed	
Indiangrass					
vine mesquite					
buffalograss	20				
white tridens					
low panicums					
low paspalums	5				
knotroot bristlegrass					

b. As retrogression occurs, trees and shrubs often increase to form a dense canopy. As this happens, the shade sensitive prairie grasses decrease and the shade tolerant grasses become more prominent. Bermudagrass and Buffalograss tend to increase in closely grazed open areas. In a deteriorated condition many of the following invaders may be seen growing on the site: bushy bluestem, ragweed, bitter sneezeweed, fogfruit, prairie coneflower, snow-on-the-prairie, sump weed, annual grasses and forbs and spiny aster in wet places.

c. Approximate total annual yield of this site in excellent condition ranges from 4500 pounds per acre in poor years to 8000 pounds per acre of air-dry vegetation in good years.

4. WILDLIFE NATIVE TO THE SITE: This site is used by deer, squirrels, turkey, quail and dove, and javelina.

5. GUIDE TO INITIAL STOCKING RATE:

a.

Condition Class	Climax Vegetation	Ac/AU/4L
Excellent	76-100	7-10
Good	51-75	9-13
Fair	26-50	12-16
Poor	0-25	15+

RELATIVE FORAGE QUALITY OF SPECIES

a. Cattle

Primary	Secondary	Low Value
Virginia wildrye	rusty seed paspalum	bushy bluestem
big bluestem	vine mesquite	annual grasses
Indiangrass	buffalo grass	annual forbs
little bluestem	southwestern bristlegrass	prairie cone-flower
switchgrass	low panicums	woody plants
four flower trichloris	low paspalums	
	sedges	

b. Deer

Primary	Secondary	Low Value
bundleflower	low paspalums	most grasses
hairy ruellia	low panicums	baccharis
most annual forbs	maximillian sunflower	prairie cone-flower
hairy tubetongue	elm	
sedges	spiny aster	
snoutbean	Texas wintergrass	
Engleman daisy		
greenbriar		
hackberry		

c. Quail & dove

Primary	Secondary	Low Value
croton seed	tender grasses & forbs (quail)	fuzzy seeded grasses & forbs
ragweed seed	sumpweed	non-mast producing woody plants
sunflower seed		
panicums sp. seed		
paspalum sp. seed		

d. Turkey

Primary	Secondary	Low Value
Tender grasses	mats from other woody plants	most other grasses
hackberry (fruit)		
oak mast		
pecans		

Legend and Definitions for Range Site Descriptions.

1/ This rating system provides general guidance as to animal preference for plant species. It also indicates possible competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animals, upon plant palatability and nutritive value, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect a plant's ecological place in the climax plant community.

The following definitions apply to cattle, sheep, goats, deer, and antelope grazing.

Primary: These species generally decrease when the climax plant community is subjected to continuous heavy grazing pressure by the animals listed.

Secondary: These plants usually increase initially, then decrease when the site is subjected to continuous heavy grazing use by the animals listed.

Low Value: These plants continue to increase or invade with heavy continuous grazing use of the site.

For squirrel, peceary and birds the terms primary, secondary, and low value indicate species preference only. They do not indicate plant response to feeding pressure, nor do they have any ecological significance.