

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

Ecological Site Description

Site name: DRY SAVANNA
 Site number: R-271ZY021PR
 Major Land Resource Area: 271 Semiarid Mountains and Valleys
 Interstate correlation: NONE

Physiographic features:

This site occurs on steep mountain summits, side slopes and foot slopes in the semiarid region. It is formed in residuum and colluvium that weathered from volcanic and limestone bedrock. Elevation ranges from 30 to 1000 feet.

Climatic features

Frost-free period: 365 DAYS
 Freeze-free period: 365 DAYS
 Mean annual precipitation: 33 inches
 Mean annual air temperature: 79°F
 Mean annual soil temperature:
 Monthly moisture and temperature distribution:

	Mean Precipitation (inches)	Percent Precipitation (%)	Mean Temperature (°F)
January	.78	2.36	76
February	.72	2.18	76
March	.86	2.63	77
April	1.92	5.82	78
May	2.92	8.85	80
June	3.13	9.48	81
July	2.91	8.82	82
August	4.45	13.48	82
September	5.26	15.94	81
October	5.63	17.26	81
November	3.18	9.64	79
December	1.20	3.64	77
Mean annual	33		79°F

Other climatic features: A rainy season prevails from July to November and a pronounced dry season occurs during the remainder of the year. Hurricanes are most

likely to occur from August to November, and are characterized by strong winds and torrential rains.

Associated water features: Some intermittent rivers and creeks.

Elevation Aspect: 25 to 50 ft.

Percent Slope: 2 to 20

Soils:

Soils of this site are deep, well drained, moderately fine to fine textured formed from volcanic and limestone rocks. They are neutral to calcareous and occurs on nearly level to sloping terraces, alluvial fans, foot slopes and drainage ways in the southern uplands. Permeability varies from moderate to slow and the available water capacity from moderate to high.

Major Soil Taxonomic Units correlated to this site include:

- Amelia Ao
- Amelia-Maguayo, AmB, AmC2
- Camp Santiago, CaB
- Coamo, ClB, ClC
- Jacana, Cl, JnC, JaB, JaC, JaC2, JcB, JcC
- Llanos, LnB, LnC2
- Pozo Blanco, PrC2
- Yauco, YcB, YcC

Plant communities:

This site consists primarily of tufted perennial grasses that are drought tolerant with scattered large flat top trees. The site exists in the southern foothills. Grasses constitute approximately 78% of the composition, forbs make up to 8% and trees about 12%. Some introduced grass species are adapted to this site. These highly palatable species include Guinea and Buffel grass. They exist in varying levels of dominance due to past or existing grazing pressure.

Major plant species composition

Predominant plant community: Hurricane grass (*Bothriocloa pertusa*)-Guinea grass (*Urochloa maxima*). This composition is normal year round. Scattered trees and shrubs include Tamarind (*Tamarindus indica*), *Albizia lebbek*, *A. procera*, Mesquite (*Prosopis juliflora*), Aroma (*Acacia toruosa*), Fruta bomba (*Calotropis sp.*), *Croton*, and *Leucaena (Leucaena leucocephala)*.

Grasses and Grasslikes

Scientific	Common	Group	Pounds per	Percent by	Percent
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Symbol	Name		Acre	Weight	Allowed For group
BAMU	Para grass	1			
BESU	Alexandergrass	1			
BOPE	Hurricane	1			
CECI	Buffel grass	1			
CEEC	Southern sandbur	1			
CHIN	Paraguaita morada	1			
CLIN4	Mexican bluegrass	1			
CYDA	Bermuda grass	1			
DAAE	Egyptian grass	1			
DIAN	Kleberg	1			
ECCO	Jungle rice	1			
ELIN	Goosegrass	1			
PACO	Horquetilla	1			
PAFI	Pata conejo	1			
PANIC	Sprawling panic	1			
SEGE	Knotroot bristlegrass	1			
URMA4	Guinea	1			

Forbs

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
CAGI1	Calotropis	2			
JAGO	Tautaba	2			
MAAT	Siratro	2			
SIAG	Sensitive plant	2			
VICIA	Vicia	2			

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
BUBU	Black olive	4			
CEPE2	Silk cotton tree	3			
EISI	Turpentine	4			
GUUL	West indian elm	4			

LELE10	Tan Tan	3			
PRJU	Mesquite	4			

Ground Cover and Structure

	Height Above the Ground											
	Not applicable		6 to 12 inches		12 to 24 inches		24 to 60 inches		60 to 80 inches		180 to 240 inches	
	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover
Trees											1	5
Shrubs									1	5		
Grasses and grasslikes							15	60				
Forbs			2	15								
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways: This site represents a climax community for the dominant species composition Hurricane (*Bothriochloa pertusa*)-Angleton (*Dichanthium annulatum*)-Guinea (*Urochloa maxima*). As these grasses are grazed continually its relative composition changes. Should this site be overgrazed hurricane will dominate. If overgrazing continues, thorny/shrubby vegetation will increase.

Total annual production: 10,000-lb/ac normal year

Plant Growth Curves:

Growth curve number: PR001

Growth curve name: PR PLANT GROWTH CURVE

Growth curve description: Native and naturalized grasslands.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	5	4	7	12	10	9	10	11	10	9	7

Animal Community

This site is important several wildlife species. Major species using the site include:

Adelaide's warbler
 Barn swallow
 Buteo
 Caribbean elaenia
 Cattle egret

Helmeted guinea fowl
Iguana iguana
Lesser antillian pewee
Lizards
Mangose
Mangrove cuckoo
Mourning dove
Northen mockingbird
Other rodents
Ovenbird
Patas (Monkey)
Pearly eyed thrasher
Peregrine Falco
Prairie warbler
Puerto Rican flycatcher
Puerto Rican nighthjar
Rhesus (Monkey)
Sparrow hawk
Turkey vulture
Yellow faced grassquit

Associated sites: SANDY PLAIN

Similar sites

Plant communities, production, and vigor of this site is similar enough to other sites in the region to cause a problem or concern mainly during the dry season.

Site documentation:

Author: M. Montes, E. Más, C. Santiago

Revised: 05/2002 E. Más, J. Lugo, S. Ríos

Supporting data for site development: Supporting data include clipping studies, and historical writing of the area. More documentation and study are needed to fully understand this site and the transitions that occur.

Sampling techniques

SCS-Range 417

Type locality: Camp Santiago, Salinas, PR
South to Road 116, Los Hornos entrance, Lajas, PR

Field Offices: Juana Díaz, Ponce, San Germán

References:

USDA, NRCS. 1997. National Range and Pasture Handbook.

USDA, SCS. Lajas Soil Survey, Ponce Soil Survey, Humacao Soil Survey

Site Approval:

This site has been reviewed and approved for use:

USDA NRCS Resource Conservationist

Date