

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

Ecological Site Description

Site name: MOIST SHALLOW
Site number: R-270ZY029PR
Major Land Resource Area: 270 Humid Mountains and Valleys
Interstate correlation: NONE

Physiographic features: There are three distinct elevation ranges in this area and possess the highest precipitation and lowest temperatures. Surface water from precipitation, perennial streams, and lakes are abundant. Ground water is limited to water that seeps into the soil and is stored in the dense and massive underlying volcanic rock.

Climatic features

Frost-free period: 365 DAYS
Freeze-free period: 365 DAYS
Mean annual precipitation: 35 TO 50 INCHES
Mean annual air temperature: (26°C) 78 to 80°F
Mean annual soil temperature:
Monthly moisture and temperature distribution:

	Mean Precipitation (inches)	Percent Precipitation (%)	Mean Temperature (°F)
January	3.32	4.66	67
February	2.61	3.66	67
March	4.01	5.63	67
April	4.41	6.19	68
May	3.88	5.44	71
June	5.47	7.68	72
July	6.16	8.65	72
August	7.61	10.6	73
September	12.12	17.02	72
October	11.54	16.20	72
November	6.64	9.32	70
December	3.43	4.81	68
Mean annual	71.2		

Other climatic features:

Associated water features:

Elevation Aspect: 50 to 1500 ft.

Percent Slope: 2 to 60

Soils: Soils of this site are very shallow to shallow, well to poorly drained, formed from partly weathered plutonic rocks, mainly quartz and residues of volcanic rocks. They are moderately steep and are on the side slopes and ridgetops of the humid uplands.

Major Soil Taxonomic Units correlated to this site include:

Adjuntas, AaF2
Caguabo, CaE, CaF, CbF, CdF, CbD2, CbF2
Guayabota, GuE2, GvF
Malaya, MIF
Morado, MtE2, MtF2, MuF2
Pandura, PaD, PaE, PaF, PdF, PaE2, PaF2
Sabana, SaE2, SaF2, SaF
Teja, TeE
Yunes, YeE, YeF, YuF2

Plant communities: This site consists primarily of drought tolerant bunch grasses.

Major plant species composition: Grasses constitute about 85% of the composition, forbs and grasslike 10% and shrubs 5%.

GRASSES AND GRASSLIKES

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For Group
ANBI	Foxtail grass	1			
ANLE	Beardgrass	1			
ANSA5	Silver beargrass	1			
ARCO11	Rat tail grass	1			
AXCO	Carpet grass	1			
BRAD	Redtop millet	1			
CEEC	Southern sandbur	1			
CYDA	Bermuda grass	1			
DAAE	Durban crowfoot	1			
DIFA2	Matojo	1			
DISA	Crabgrass	1			
HECO10	Tanglegrass	1			
PADE7	Pendejuelo	1			
PALA8	Woodlands grass	1			
PAMI4	Mat paspalum	1			
PANO2	Bahia grass	1			

PAPL3	Brownseed paspalum	1			
PARU	Matojillo	1			
PATR3	Carruzo	1			
SEGE	Knot root bristlegrass	1			
SOSE6	Millet	1			
SPIN4	Cerrillo	1			
VECI2	Rabo de buey	1			

FORBS

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
ISSY	Indigo	2			
URLO	Cadillo	2			
SICA17	Wireweed	2			

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
LACA2	Yellow sage	3			
SOTO4	Turkeyberry	3			
LAIN2	Santa Maria	3			
PSGU	Guava	3			

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												
Shrubs									2	10		
Grasses and grasslikes									15	70		
Forbs												
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways: If the site is grazed heavily, there will be a marked decrease of whorled dropseed and an increase of foxtail grass. If heavy graze continues, a pure stand

of foxtail will dominate with an increase of forbs. In final stages of degradation a pure stand of tanglegrass will dominate.

Total annual production: 1800 lbs/acre

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 for several wildlife species. Major species using the site include:

- Anolis spp.
- Bridled quali dove
- Broad winged hawk
- Eleutherodactylus spp.
- Green mango
- Green throated carib
- Hummingbird
- Merlin
- Plain pigeon
- Puerto rican emerald hummingbird
- Puerto rican nightjar
- Puerto rican screech
- Puerto rican tody
- Puerto rican woodpecker
- Red jungle fowl
- Red tailed hawk
- Ruddy quail dove
- Scaly naped pigeon
- Sharp shined hawk

Associated sites: None

Similar sites

Plant communities, production, and vigor of this site is not similar enough to other sites in the region to cause a problem or concern.

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: Villaba Arriba Ward

Field Offices: Juana Díaz, Ponce

References:

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

USDA, SCS. Soil Survey's

Site Approval:

This site has been reviewed and approved for use:

USDA NRCS Resource Conservationist

Date