UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Ecological Site Description

Site name: SALINE LOWLAND
Site number: R-273ZY030PR
Major Land Resource Area: 273 Semiarid Coastal Plains
Interstate correlation: NONE

Physiographic features: Elevation of this site ranges from sea level to 1200 ft. Most of the area is nearly level to gently slopping. Elevation increases gradually from the beaches on the Caribbean Sea to the foothills of the semiarid mountains to the north. Limestone ridges are similar to those in the Humid Coastal Plains but they lack the striking karst features. All drainage is superficial and flows in a southerly direction.

Climatic features
Frost-free period: 365 DAYS
Freeze-free period: 365 DAYS
Mean annual precipitation: 30 TO 45 INCHES
Mean annual air temperature: (26ºC) 78 to 80ºF
Mean annual soil temperature:
Monthly moisture and temperature distribution:

	Mean Precipitation (inches)	Percent Precipitation (%)	Mean Temperature (F)
January	.90	2.19	76
February	.80	1.95	76
March	1.40	3.41	77
April	2.10	5.12	78
May	4.20	10.24	80
June	2.50	6.09	81
July	2.90	7.07	82
August	5.70	13.90	82
September	5.70	13.90	81
October	8.50	20.73	81
November	5.00	12.2	79
December	1.30	3.17	77
Mean annual	**41**		

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 August through November, and are characterized by strong winds and torrential rains. Surface water is scarce because of limited rainfall and high evaporation rates. Low rainfall and steep topography of the adjacent semiarid mountains to the north provide little additional surface water.

Associated water features: Streams and rivers generally are intermittent. In places artesian pressure brings saline and sodic ground water to the surface.

Soils: Soils of this site are deep, somewhat to poorly drained, coarse to fine in texture, with high salinity level. Nearly level soils on alluvial fans on the southern coastal plains near the beach. Permeability is rapid to moderate and the available water capacity is low to moderate.

Major Soil Taxonomic Units correlated to this site include:

Serrano, Se

Plant communities:

This site consists primarily of tufted perennial grasses that are tolerant to saline conditions. The site exists in a narrow belt fringing the ocean and alluvial fans in the semiarid southern coastal plain.

Major plant species composition:

Grasses constitute approximately 97% of the vegetative composition, and forbs the remaining 3%.

GRASSES AND GRASSLIKES

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For Group
BOPE2	Hurricane grass	1			
CLIN4	Mexican bluegrass	1			
CYDA	Bermuda grass	1			
DAAE	Egyptian grass	1			
DIAN	Angleton grass	1			
ERCI2	Lovegrass	1			
PADI6	Knot grass	1			
PASPA	Paspaldium geminatum	1			
PAVA	Paspalum vaginatum	1			
SEGE	Knot bristle	1			
SPPY2	Pyramid dropseed	1			
SPVI3	Beachgrass	1			

FORBS

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
AEAM	Aeschynomene	2			
BAMA5	Saltworth	2			
COSC	Pega pollo	2			
DEVI3	Desmanthus	2			
HECU3	Heliotrope	2			
KAPI	Life plant	2			
LIMI6	Lippia	2			
PHVE	Salt weed	2			
POQU2	Chickweed	2			
SACEM3	Florida elder	2			
SEPO2	Sea purslane	2			
SIAG	Horseweed	2			
SICA17	Wireweed	2			

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
ANIN	Angeline tree (Moca)	4			
GUUL	West indian elm (Guacima)	3			
PIDI	Madras thorn	3			
PIUN	Catclaw	3			
PRJU4	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												
Shrubs												
Grasses and grasslikes							10	70				
Forbs			5	15								
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways:

The native climax vegetation are generally replaced by such secondary grasses as egyptian grass, whorled dropseed, lovegrass and knotgrass. The grasses generally dominate the site when subject to sever overgrazing. The secondary grasses and shrubby and thorny vegetation will again dominate, Paragrass may occur on this site but under abusive grazing the area. Under the canopy of the shrubs, *Paspalum gemintaum* and *Chloris* emerge covering about 90% of the ground.

Total annual production: 675 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:

American bittern
Black necked stilt
Black tern
Blue winged teal

Brown pelican
Cattle egret
Clapper rail
Common moorhen
Common tern
Great blue heron
Great egret
Greater flamingo
Green backed heron
Hudsonian curlew
Lesser yellowleg
Little blue heron
Mangrove cuckoo
Northern harrier
Osprey
Peregrine falcon
Roseate tern
Snowy egret
Sora
Spotted sandpiper
Tricolored heron
Western sandpiper
White cheeked pintail
White crowned pigeon
Yellow crowned night heron

Associated sites:

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

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Revised: 04/2002, 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: Ponce Airport Area, (Finca Serrallés), Ponce, PR

Field Offices: Juana Díaz, Guayama, 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