UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Ecological Site Description

Site name: COASTAL MARSH
Site number: R-272ZY013PR
Major Land Resource Area: 272 Humid Coastal Plains
Interstate correlation: NONE

Physiographic features: Elevation of this site ranges from sea level to 2000ft rising gradually from the beaches on the Atlantic Ocean to the hilly karst area to the south. The area is divided in two distinct zones, the flat alluvial plains and terraces along the coast and the irregular features of the karst limestone inland.

Climatic features
Frost-free period: 365 DAYS
Freeze-free period: 365 DAYS
Mean annual precipitation: 33 INCHES
Mean annual air temperature: 79ºF
Mean annual soil temperature:
Monthly moisture and temperature distribution:

	Mean Precipitation (inches)	**Percent Precipitation (%)**	**Mean Temperature (ºF)**
January	.78	2.36	76
February	.72	2.18	76
March	.86	2.60	77
April	1.92	5.81	78
May	2.92	8.84	80
June	3.13	9.48	81
July	2.91	8.81	82
August	4.45	13.48	82
September	5.26	15.93	81
October	5.63	17.06	81
November	3.18	9.63	79
December	1.20	3.63	77
Mean annual	**33**		**79ºF**

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.

Associated water features: Surface and ground water are plentiful. Surface water consists of runoff from rainfall in the humid uplands.

Elevation Aspects: 10 to 50 ft.

Percent Slope: 0 to 2

Soils: Soils of this site are deep, poorly drained and saline. The soils are on nearly level areas between the tidal flats and the valleys of the humid coastal plains.

Major Soil Taxonomic Units correlated to this site include:

Alluvial Land, An
Bajura, Bc
Bajura, Ba
Saltwater Marsh, Sm
Tidal Flats, Tf

Plant communities:

This site consists primarily of vegetation that is salt tolerant. The site exists in the narrow zone at the edge of the mangrove forest along the sandy beaches fringing the seashore in the dry coastal plain. In the dry areas of the site where there is a salt concentration of over 4% the area remains bare of vegetation.

Major plant species composition

Where the concentration is about 3% and the water availability is higher but not sufficient for mangroves, verdolaga and varilla are the dominant plant species. These two forbs constitute nearly 100% of the total vegetative composition. No grasses occur except on the very margins of the site. Grasses make up less than 1% of the composition.

GRASSES AND GRASSLIKES

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For Group
CHRA	Chloris	1			

FORBS

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
BAMA5	Saltwort	2			
SEPO2	Sea purslane	2			

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group

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			<1									
Forbs			20	98								
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways:

This site is very fragile and critical for wildlife habitat. The native climax vegetation of the site is an integral part of the mangrove ecosystem. This vegetation is very susceptible to foraging animals and use by livestock generally reduces the useful function of the site. Therefore, heavy stocking should not be allowed, in most cases **livestock must be avoided**. If the vegetation is disturbed, a slow recovery is expected with annual salt tolerant species invading suitable areas.

Total annual production: 900 to 1000 lbs/acre

Plant Growth Curves:

Growth curve number:
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: 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:

Field Offices: Mayagüez, PR

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