

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

Ecological Site Description

Site name: COASTAL SAND
 Site number: R-273ZY014VI
 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 sloping. 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: 41.39 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	1.99	2.41	76
February	1.58	3.81	76
March	1.67	4.03	77
April	2.48	5.99	78
May	3.44	8.31	80
June	2.66	6.42	81
July	2.77	6.69	82
August	4.24	10.24	82
September	5.74	13.86	81
October	5.53	13.36	81
November	5.74	6.43	79
December	3.55	3.90	77
Mean annual	41.39		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 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.

Elevation Aspect: 0 to 20 ft.

Percent Slope: 0 to 12

Soils: Soils of this site are very deep, excessively drained, very rapidly permeable, and have a sandy and extremely stony texture. The areas are on nearly level to gently sloping calcareous sand deposits. They occur on vegetated beach areas along the seacoast. They are rarely to occasionally flooded by saline water for a very brief duration.

Major Soil Taxonomic Units correlated to this site include:

Jaucas, JaB
Lameshur, LmB
Redhook, RdB

Plant communities:

This site occurs as active or younger dunes. Only plants that can withstand partial burial and grow rapidly while the sand is being deposited survive. Soils are periodically covered with brackish water. Dominant vegetation consists of salt tolerant species.

Major plant species composition

Grasses constitute 70% of the composition, forbs about 7%, shrubs and shrub/trees 19% and trees about 4%. The coastal side on this site is a barren areas exposed to wind erosion. This natural soil condition is extremely important because is the preferred habitat for sea turtle nesting. Turtles nesting areas are federally and locally protected by law.

GRASSES AND GRASSLIKES

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For Group
CEEC	Southern sandbur	1			
CHIN4	Mexican bluegrass	1			
PALA12	Cocconut paspalum	1			
SPPA	Saltmeadow	1			

	sordgrass				
SPVI3	Beachgrass	1			

FORBS

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
CYPL4	Flatsedge	3			
IPPE	Bay hops	3			
SEPO2	Sea purslane	3			
STHA	Stylo	3			
WETR	Wedelia	3			

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
CABI13	Goatweed	3			
CALA2	Sea rocket	3			
COHI3	Jackswitch	3			
CROTO	Croton	3			
DEVI3	Wild tan tan	3			
INSU	Indigo	3			
SUMA2	Bay cedar	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											1	10
Grasses and grasslikes									10	70		
Forbs					1	3						
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways:

This site is very fragile. Any disturbance to the existing vegetation results in loss of cover and subsequent wind erosion. **Great care needs to be taken to protect this site from**

any grazing pressure so that the sand is stabilized by natural means. Introduction of any species must be avoided.

Total annual production: 3000 to 3500 lbs/acre

Plant Growth Curves:

Growth curve number: 001

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:

Green turtle
Kawksbill
Leatherback

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

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

Climatic data: Frederiksted 1 SE Station

Type locality: Sandy Point, St. John, USVI

Field Offices: St. Croix

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