

Archbold Biological Station - Site 3: Sand Scrub (*proposed*)

Soil Series and Map Unit Name: Satellite sand (inclusion of Archbold sand, 0 to 5 percent slopes)

Map Unit Symbol: 14

SITE DATA:

Elevation: About 143 feet above MSL (Sunderland Marine Terrace)

Slope: 0 to 5 percent; On site: Nearly level with less than 1% gradient

Slope shape(Up/Down-Across): Convex-convex, convex-linear, linear-convex

Geomorphic positions: Summits, shoulders, and backslopes on ridges and rises

Archbold data:

Parent Material: Sandy marine deposits

Drainage Class: Well drained

Depth to seasonal high water table: 107 to greater than 203 centimeters from June through November

Ecological Community: Sand scrub

Vegetation: Sand Live Oak (*Quercus Geminata*), Florida Rosemary (*Ceratiola ericodes*), Scrub Palmetto (*Sabal etonia*), Saw palmetto (*Serenoa repens*), Silk Bay (*Persea borbonia*), Gopher Apple (*Licania michauxii*), Sand Pine (*Pinus clausa*), Prickly-Pear (*Opuntia spp.*), Hog Plum (*Ximenia Americana*), Sand Spike-moss (*Selaginella arenicola*)



ARCHBOLD PEDON DESCRIPTION (from Archbold Biological Station):

Taxonomic Classification: Hyperthermic, uncoated Typic Quartzipsamments

Location: Highlands County, Florida. Archbold Biological Station; 0.1 mile north and 0.8 mile west of station headquarters; SW ¼, SW ¼, Sec. 7, R. 30 E., T. 38 S.

Describers: F. Sodek, E.W. Hopwood (IFAS) and L.J. Carter, D.L. Lewis, J. Vega (NRCS).



A horizon - 0 to 10 centimeters: Gray (10YR 6/1) sand; single grain; loose; many fine and medium roots; very strongly acid; gradual wavy boundary. **E horizon (upper)** - 10 to 86 centimeters: White (10YR 8/1) sand; single grain; loose;

many fine and medium roots; moderately acid; gradual wavy boundary.

E horizon (middle) - 86 to 145 centimeters: White (10YR 8/1) sand; single grain; loose; many fine and medium roots; moderately acid; gradual wavy boundary.

E horizon (lower) - 145 to 203 centimeters: White (10YR 8/1) sand; single grain; loose; many fine and medium roots; moderately acid.

Note: Horizon designation changed from C horizons to E horizons based on presumption of underlying diagnostic horizons below 203 centimeters and to reflect the lab data which are supportive of E horizon (zone of eluviation).

Archbold Biological Station - Site 3: Sand Scrub (*proposed*)

ARCHBOLD SERIES RANGE IN CHARACTERISTICS: Soil reaction ranges from very strongly acid to slightly alkaline in all horizons.

The A or Ap horizon is a mixture of black (10YR 2/1) organic matter and white (10YR 8/1) sand grains. When rubbed, this horizon has hue of 10YR or 2.5Y, value of 3 to 5, and chroma of 1 or 2; or it is neutral with value of 3 to 5. Texture is coarse sand, sand, or fine sand.

The C horizon has hue of 10YR or 2.5Y, with value of 5 to 8, and chroma of 1 or 2; or it is neutral with value of 5 to 8. Upon burning the sand does not change color. Redoximorphic features in shades of yellow, brown, or red range from none to common. Texture is coarse sand, sand, or fine sand.

LABORATORY RESULTS (from Archbold Biological Station):

TOP DEPTH	BOTTOM DEPTH	VCO SAND	COARSE SAND	MEDIUM SAND	FINE SAND	VERY FINE SAND	TOTAL SAND	TOTAL SILT	TOTAL CLAY	TEXTURE CLASS	BULK DENSITY	AWC	PH H2O	ORGANIC CARBON	TOTAL BASES	CEC SUM	BASE SAT
0	10	0	1.7	68.6	27.9	1.4	99.6	0	0.4	S	1.55	0.03	5.3	0.27	0.09	0.77	12
10	86	0	2.7	69.5	26.1	1.3	99.6	0	0.4	S	1.47	0.04	5.7	0.05	0.04	0.22	18
86	145	0	2	66.8	29.9	1	99.7	0	0.3	S	1.63	0.05	5.8	0.05	0.06	0.15	40
145	203	0	2.1	63.3	33.1	1.2	99.7	0	0.3	S	NA	NA	5.9	0.02	0.02	0.15	13