Archbold Biological Station - Site 4: Scrubby Flatwoods *(proposed)*

**Soil Series and Map Unit Name:** Satellite sand  
**Map Unit Symbol:** 14

**SITE DATA:**
- **Elevation:** About 140 feet above MSL (Sunderland Marine Terrace)  
- **Slope:** 0 to 2 percent; On site: Nearly level with less than 1% gradient  
- **Slope shape (Up/Down-Across):** Linear-linear, linear-convex, convex-linear  
- **Geomorphic positions:** Flats, rises  
- **Parent Material:** Sandy marine sediments  
- **Drainage Class:** Somewhat poorly drained  
- **Depth to seasonal high water table:** From 25 to 104 centimeters from June through November  
- **Ecological Community:** Scrubby flatwoods  

**SATELLITE PEDON DESCRIPTON (from Highlands County):**
- **Taxonomic Classification:** Hyperthermic, uncoated Aquic Quartzipsamments  
- **Location:** Highlands County, Florida. USAF Bombing Range, about 2800 feet north and 40 feet west of SE corner of Sec. 7, T. 33 S., R. 31 E.  
- **Describers:** F. Sodek, E.W. Hopwood (IFAS) and L.J. Carter, D.L. Lewis, J. Vega (NRCS).

A horizon - 0 to 10 centimeters: Dark gray (10YR 4/1) sand; single grain; loose; very strongly acid; clear smooth boundary.  
E horizon - 10 to 66 centimeters: White (10YR 8/1) fine sand; few large distinct brown (10YR 5/3 and 5/4) mottles along old root channels; single grain; loose; strongly acid; gradual wavy boundary.  
E horizon (upper) - 66 to 127 centimeters: White (10YR 8/1) fine sand; single grain; loose; moderately acid; gradual wavy boundary.  
E horizon (lower) - 127 to 203 centimeters: White (10YR 8/1) fine sand; single grain; loose; 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 results of the lab data which are supportive of E horizon (zone of eluviation).
**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 Highlands County):**

<table>
<thead>
<tr>
<th>TOP DEPTH</th>
<th>BOTTOM DEPTH</th>
<th>VC SAND</th>
<th>COARSE SAND</th>
<th>MEDIUM SAND</th>
<th>FINE SAND</th>
<th>VERY FINE SAND</th>
<th>TOTAL SAND</th>
<th>TOTAL Silt</th>
<th>TOTAL CLAY</th>
<th>TEXTURE CLASS</th>
<th>BULK DENSITY</th>
<th>AWC</th>
<th>PH H2O</th>
<th>ORGANIC CARBON</th>
<th>TOTAL BASES</th>
<th>CEC</th>
<th>BASE SAT</th>
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<tbody>
<tr>
<td>0</td>
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<td>1.7</td>
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<td>49.4</td>
<td>2.5</td>
<td>98</td>
<td>1.5</td>
<td>0.5</td>
<td>S</td>
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<td>0.05</td>
<td>4.6</td>
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<td>1.93</td>
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<tr>
<td>10</td>
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<td>0.5</td>
<td>40.1</td>
<td>52.8</td>
<td>3.4</td>
<td>98.8</td>
<td>1</td>
<td>0.2</td>
<td>FS</td>
<td>1.66</td>
<td>0.04</td>
<td>5.4</td>
<td>0.04</td>
<td>0.04</td>
<td>0.92</td>
<td>4</td>
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<tr>
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<td>38.8</td>
<td>55.5</td>
<td>3.8</td>
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