Goodbye “Lakeland Fine Sand” – Welcome “Blanton-Foxworth-Alpin complex”

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The soil series called Lakeland Fine Sand (0-5 percent slope), is found in over 11,368 acres in Suwannee county and including the North Florida Research and Education Center in Live Oak, FL (NFREC). According to the 1965 Soil Survey of Suwannee County, Florida (Houston, 1965), the soils in this series are described as nearly level to sloping for the most part but are strongly sloping in a few small areas. The surface layer ranges from gray to dark grayish brown in color and from 2 to 6 inches in thickness. The darker colors can usually be found in the cultivated areas. The subsurface layer is yellowish brown but in a few places it is brownish yellow. In cultivated areas, a transitional layer usually occurs between the surface layer and the subsurface layer. This layer can be a mixture of pale brown, gray and yellowish brown. In a few places medium-sized splotches of light gray and white occur in this soil nearer the surface than normal, or at a depth of 30 to 42 inches.
These soils are deep, well drained to excessively drained, strongly acidic and coarse textured. These soils are low in natural fertility and in organic matter content. It has a deep root zone, is in good tilth and can be plowed within a short time after heavy rainfall. It is droughty, very rapidly permeable, and as a result plant nutrients leach out of it readily. If well managed, this soil is moderately well suited to the general farm crops grown in the county.

In the 2006 soil survey report of Suwannee County (Weatherspoon, 2006), the nomenclature for the different soil types was modified. Some of the soil map units are now made up of two or more major soils or miscellaneous areas. These map units are complexes or undifferentiated groups. A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Hence, the soil type of the NFREC under the new nomenclature is “Blanton-Foxworth-Alpin Complex”. This soil complex is composed of 35% of Blanton and similar soils, 30% of Foxworth and similar soils, and 25% of Alpin and similar soils and the characteristics of the individual soil types are described in Table 1.

References:

Figure 1: Typical profile of Alpin fine sand, 0 to 5 percent slopes. Depth is marked in centimeters and meters (Weatherspoon, 2006).
Table 1: Characteristics of individual soil units of Blanton-Foxworth-Alpin soil Complex. (Weatherspoon, 2006).
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Blanton</th>
<th>Foxworth</th>
<th>Alpin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Land Resource Area</td>
<td>138—North-Central Florida Ridge</td>
<td>138—North-Central Florida Ridge</td>
<td>138—North-Central Florida Ridge</td>
</tr>
<tr>
<td>Landform</td>
<td>Ridges on marine terraces</td>
<td>Ridges on marine terraces</td>
<td>Ridges on marine terraces</td>
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<tr>
<td>Parent material</td>
<td>Sandy and loamy marine sediments</td>
<td>Sandy marine or eolian sediments</td>
<td>Sandy marine deposits</td>
</tr>
<tr>
<td>Slope</td>
<td>0 to 5 percent</td>
<td>0 to 5 percent</td>
<td>0 to 5 percent</td>
</tr>
<tr>
<td>Depth to restrictive feature</td>
<td>Very deep (more than 60 inches)</td>
<td>Very deep (more than 60 inches)</td>
<td>Very deep (more than 60 inches)</td>
</tr>
<tr>
<td>Drainage class</td>
<td>Moderately well drained</td>
<td>Moderately well drained</td>
<td>Excessively drained</td>
</tr>
<tr>
<td>Slowest permeability</td>
<td>Moderately slow</td>
<td>Rapid</td>
<td>Moderately rapid</td>
</tr>
<tr>
<td>Available water capacity</td>
<td>Very low</td>
<td>Very low</td>
<td>Very low</td>
</tr>
<tr>
<td>Shrink-swell potential</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Flooding</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Ponding</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Depth to seasonal water saturation</td>
<td>42 to 72 inches</td>
<td>48 to 72 inches</td>
<td>More than 72 inches</td>
</tr>
<tr>
<td>Ecological community</td>
<td>11-Upland Hardwood Hammocks</td>
<td>11-Upland Hardwood Hammocks</td>
<td>11-Upland Hardwood Hammocks</td>
</tr>
<tr>
<td>Nonirrigated land capability classification</td>
<td>3s</td>
<td>3s</td>
<td>4s</td>
</tr>
<tr>
<td>Surface layer</td>
<td>0-5 inches: dark gray fine sand</td>
<td>0-11 inches: very dark gray fine sand</td>
<td>0-6 inches: grayish brown fine sand</td>
</tr>
<tr>
<td>Subtratum</td>
<td>5-13 inches: light olive brown fine sand</td>
<td>11-35 inches: brown fine sand</td>
<td>6-20 inches: brown fine sand</td>
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<td></td>
<td>13-27 inches : light yellowish brown</td>
<td>35-46 inches: light yellowish brown fine sand</td>
<td>20-44 inches: yellow fine sand that has very pale brown stripping</td>
</tr>
<tr>
<td></td>
<td>27-36 inches : pale yellow fine sand</td>
<td>46-54 inches: yellow fine sand that has yellow and pale brown mottles</td>
<td>44-65 inches: light yellowish brown fine sand that has very dark grayish brown</td>
</tr>
<tr>
<td>Depth Range (inches)</td>
<td>Description</td>
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<td>---------------------</td>
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<tr>
<td>36-41</td>
<td>Light gray fine sand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-48</td>
<td>Pale brown sandy loam that has light brownish gray mottles</td>
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<tr>
<td>48-67</td>
<td>Mottled yellowish red, yellowish brown, and light brownish gray sandy clay loam</td>
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<tr>
<td>67-74</td>
<td>Gray sandy clay loam that has yellowish brown and light olive brown mottles</td>
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<td></td>
</tr>
<tr>
<td>74-80</td>
<td>Gray sandy clay loam that has red mottles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54-62</td>
<td>Very pale brown fine sand that has pale brown and yellow mottles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62-67</td>
<td>Very pale brown fine sand that has very pale brown mottles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67-80</td>
<td>Very pale brown fine sand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65-80</td>
<td>Stratified very pale brown fine sand and yellowish brown loamy fine sand</td>
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