

Wesby Ranch Site 4: SOUTH FLORIDA FLATWOODS (Historical NRCS)

Soil Series and Map Unit Name: EauGallie fine sand

Map Unit Symbol: 38

SITE DATA:

Elevation: About 85 feet above MSL (Wicomico Marine Terrace)

Slope: 0 to 2 percent; On site: Level with less than 1% gradient

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

Geomorphic positions: Flats, very slight rises

Parent Material: Sandy marine deposits over loamy marine sediments

Drainage Class: Poorly or very poorly drained

Depth to seasonal high water table: 15 to 46 centimeters between June through September

Ecological Community: South Florida Flatwoods (Hydric Flatwoods)

Vegetation: South Florida slash pine (*Pinus elliottii* var. *densa*), saw palmetto (*Serenoa repens*), fetterbush (*Lyonia lucida*), gallberry (*Ilex glabra*), wiregrass (*Aristida stricta* var. *beyrichiana*), Bluestems (*Andropogon spp.*), runner oak (*Quercus elliottii*), cutthroat grass (*Panicum abscissum*), wax myrtle (*Myrica cerifera*)



EAUGALLIE PEDON DESCRIPTON (from Highlands County):

Taxonomic Classification: Sandy, siliceous, hyperthermic Alfic Alaquods

Location: Highlands County, FL. USAF Bombing Range, about 600 feet north and 2600 feet west, Sec. 8, T33N.,

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



A horizon-0 to 10 centimeters: Very dark gray (10YR 3/1) fine sand, clear smooth boundary.

Eg1 horizon-10cm to 41cm: Gray (10YR 5/1) fine sand; single grained; loose; few medium and common fine roots; very strongly acid; gradual wavy boundary.

Eg2 horizon-41 to 66 centimeters: Light gray (10YR 7/1) fine sand; single grained; loose; very strongly acid; abrupt wavy boundary.

Bh1 horizon-66 to 84 centimeters: Black (5YR 2/1) fine sand; moderate medium subangular blocky structure; friable; very strongly acid; gradual wavy boundary.

Bh2 horizon-84 to 102 centimeters: Dark reddish-brown (5YR 3/2) fine sand; many medium faint dark reddish-brown (5YR 3/3) mottles; weak fine subangular blocky structure; friable; very strongly acid; gradual wavy boundary.

2Btg horizon-102 to 135 centimeters: Light brownish-gray (10YR 6/2) sandy clay loam; weak medium subangular blocky structure; friable; strongly acid; gradual wavy boundary.

Wesby Ranch Site 4: SOUTH FLORIDA FLATWOODS (Historical NRCS)

2Cg horizon-135 to 203 centimeters: Light brownish-gray (10YR 6/2) fine sandy loam; weak fine subangular blocky structure; friable; strongly acid.

EAUGALLIE SERIES RANGE IN CHARACTERISTICS: Solum thickness ranges from 46 to 90 inches. Soil reaction ranges from extremely acid to moderately acid in the A and E horizon except where limed or irrigated with alkaline artesian water, and extremely acid to slightly alkaline in all other horizons. In some areas, limestone bedrock is at a depth of 50 to 80 inches. Boulders and cobbles throughout the solum range from none to few.

The A horizon has hue of 10YR, value of 2 to 4, and chroma of 1. Undisturbed, it is a mixture of clean sand grains and organic matter. Texture is sand or fine sand.

The E horizon has hue of 10YR, value of 5 to 8, and chroma of 1 or 2; or is neutral with value of 5. Redoximorphic accumulations in shades of brown, red, or yellow, range from none to common. Texture is sand or fine sand. In depressional areas, thin muck surfaces may occur.

The Bh horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 3; or is neutral with value of 2 or 3. Sand grains are well coated with organic matter. Texture is sand, fine sand, or loamy fine sand.

The EB horizon, where present, has hue of 10YR, to 5Y, value of 5 or 6, chroma of 1 or 2. Texture is loamy sand or loamy fine sand.

The BE horizon, where present, has hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 2 to 6. Weakly cemented fragments of Bh horizon range from none to common. Texture is sand or fine sand.

The E' horizon, where present, has hue of 10YR or 2.5Y, value of 4 to 8, and chroma of 1 to 3. Texture is sand or fine sand.

The EB' horizon, where present is above the Btg horizon. It has hue of 10YR to 5Y, value of 5 or 6, and chroma of 1 or 2. Texture is loamy sand or loamy fine sand

The Btg horizon has hue of 10YR to 5Y, value of 4 to 7, and chroma of 3 or less. Redoximorphic features in shades of brown, yellow, and gray range from none to common. Texture is sandy loam, fine sandy loam, or sandy clay loam. Lenses and pockets of sand or sandy loam range from none to common.

The Cg horizon has hue of 10YR to 5Y, value of 5 to 7, and chroma of 1 to 3; or there is no dominant color and it is mixed in shades of yellow, brown, and gray. Texture ranges from sand to fine sandy loam.

LABORATORY RESULTS (from Highlands County):

| 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 | 4 | 29.2 | 55.9 | 9 | 98.1 | 1.1 | 0.8 | FS | 1.5 | 0.11 | 4.2 | 1.02 | 0.28 | 3.89 | 7 |
| 10 | 41 | 0 | 3.8 | 26.3 | 58.4 | 9.4 | 97.9 | 1.7 | 0.4 | FS | 1.58 | 0.05 | 4.9 | 0.05 | 0.13 | 0.78 | 17 |
| 41 | 66 | 0.1 | 4 | 23.8 | 59.4 | 10.8 | 98.1 | 1.5 | 0.4 | FS | 1.57 | 0.04 | 5.2 | 0.05 | 0.06 | 0.54 | 11 |
| 66 | 84 | 0.1 | 3.9 | 21.7 | 52.9 | 9 | 87.6 | 8.7 | 3.7 | FS | 1.88 | 0.24 | 4.6 | 0.69 | 0.26 | 12.76 | 2 |
| 84 | 102 | 0.1 | 3.7 | 21.8 | 55.4 | 10 | 91 | 5.3 | 3.7 | FS | 1.63 | 0.3 | 4.8 | 1.26 | 0.38 | 16.11 | 2 |
| 102 | 135 | 0 | 2.8 | 19.4 | 45.1 | 7.9 | 75.2 | 2.6 | 22.2 | SCL | 1.65 | 0.19 | 4.8 | 0.21 | 2.86 | 8.07 | 35 |
| 135 | 203 | 0 | 2.6 | 17 | 48.7 | 9.4 | 77.7 | 2.8 | 19.5 | FSL | 1.78 | 0.19 | 4.6 | 0.34 | 3.31 | 7.38 | 45 |