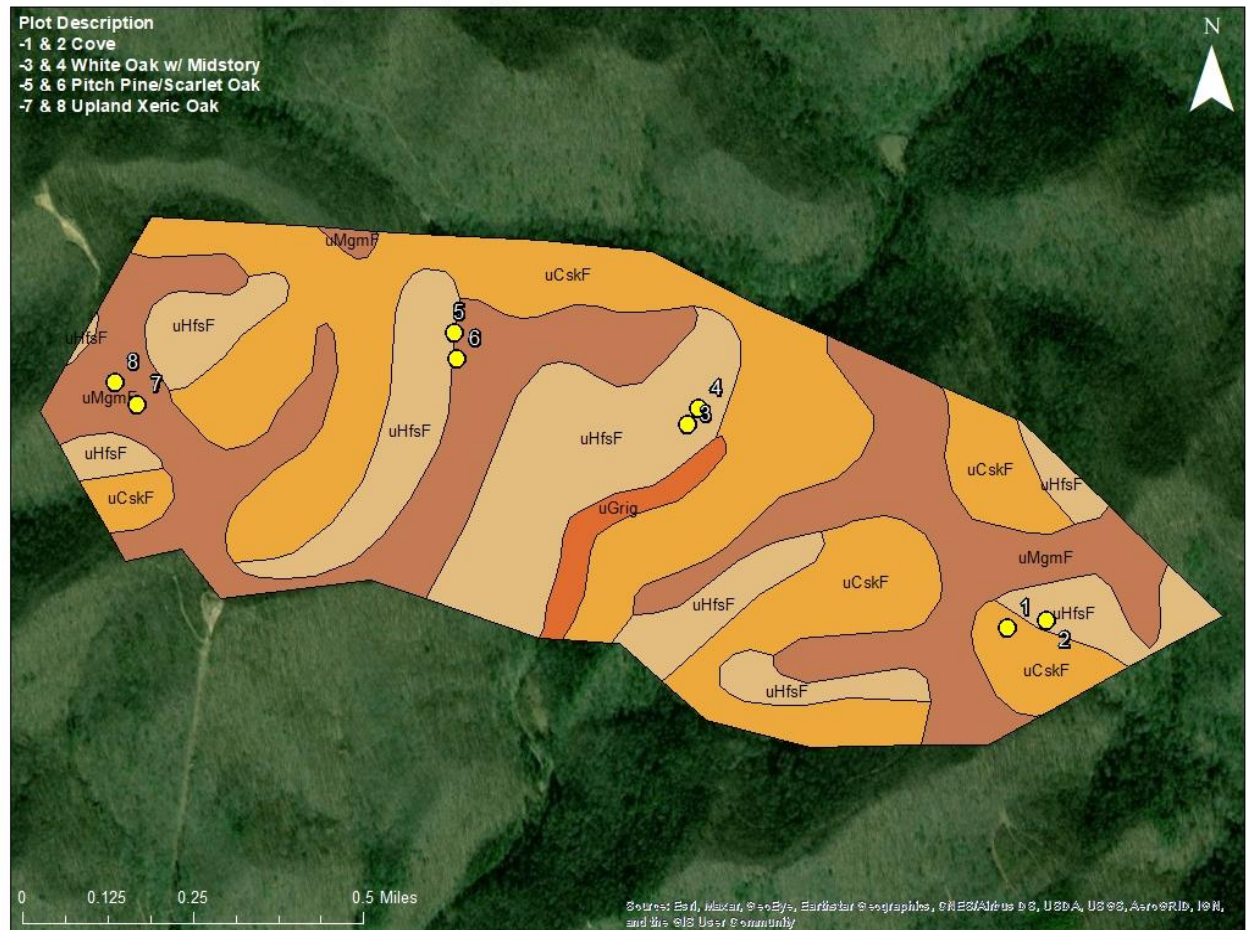


Robinson Forest Soil Report

Breathitt County, Kentucky (KY025)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
uCskF	Cloverlick-Shelocta-Kimper complex, 20 to 80 percent slopes, very stony	129.8	39.6%
uGrig	Grigsby fine sandy loam, 0 to 3 percent slopes, frequently flooded	6.4	2.0%
uHfsF	Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony	87.9	26.8%
uMgmF	Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky	103.5	31.6%
Totals for Area of Interest		327.6	100.0%

Robinson Forest - Soil Map - All Major Types



uCskF—Cloverlick-Shelocta-Kimper complex, 20 to 80 percent slopes, very stony

Map Unit Setting

- *National map unit symbol:* 2x5jg
- *Elevation:* 700 to 2,000 feet
- *Mean annual precipitation:* 28 to 52 inches
- *Mean annual air temperature:* 46 to 70 degrees F
- *Frost-free period:* 135 to 220 days
- *Farmland classification:* Not prime farmland

Description of Shelocta, Very Stony

Typical profile

- *Oi - 0 to 1 inches:* slightly decomposed plant material
- *A - 1 to 3 inches:* silt loam
- *BA - 3 to 7 inches:* loam
- *Bt1 - 7 to 23 inches:* channery silt loam
- *2Bt2 - 23 to 34 inches:* channery silt loam
- *2Bt3 - 34 to 45 inches:* very channery silt loam
- *2C - 45 to 59 inches:* very parachannery silt loam
- *2Cr - 59 to 69 inches:* bedrock

Properties and qualities

- *Slope:* 20 to 80 percent
- *Surface area covered with cobbles, stones or boulders:* 1.0 percent
- *Depth to restrictive feature:* 48 to 65 inches to paralithic bedrock
- *Drainage class:* Well drained
- *Runoff class:* High
- *Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 to 0.00 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Sodium adsorption ratio, maximum:* 2.0
- *Available water capacity:* Moderate (about 7.4 inches)

Description of Cloverlick, Very Stony

Typical profile

- *Oi - 0 to 2 inches:* channery slightly decomposed plant material
- *A - 2 to 8 inches:* channery loam
- *Bw1 - 8 to 24 inches:* channery loam
- *Bw2 - 24 to 43 inches:* very channery loam
- *BC - 43 to 80 inches:* very flaggy loam

Properties and qualities

- *Slope:* 20 to 80 percent
- *Surface area covered with cobbles, stones or boulders:* 1.0 percent
- *Depth to restrictive feature:* More than 80 inches
- *Drainage class:* Well drained
- *Runoff class:* Medium
- *Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.60 to 6.00 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Sodium adsorption ratio, maximum:* 1.0
- *Available water capacity:* Low (about 4.6 inches)

Description of **Kimper**, Very Stoney

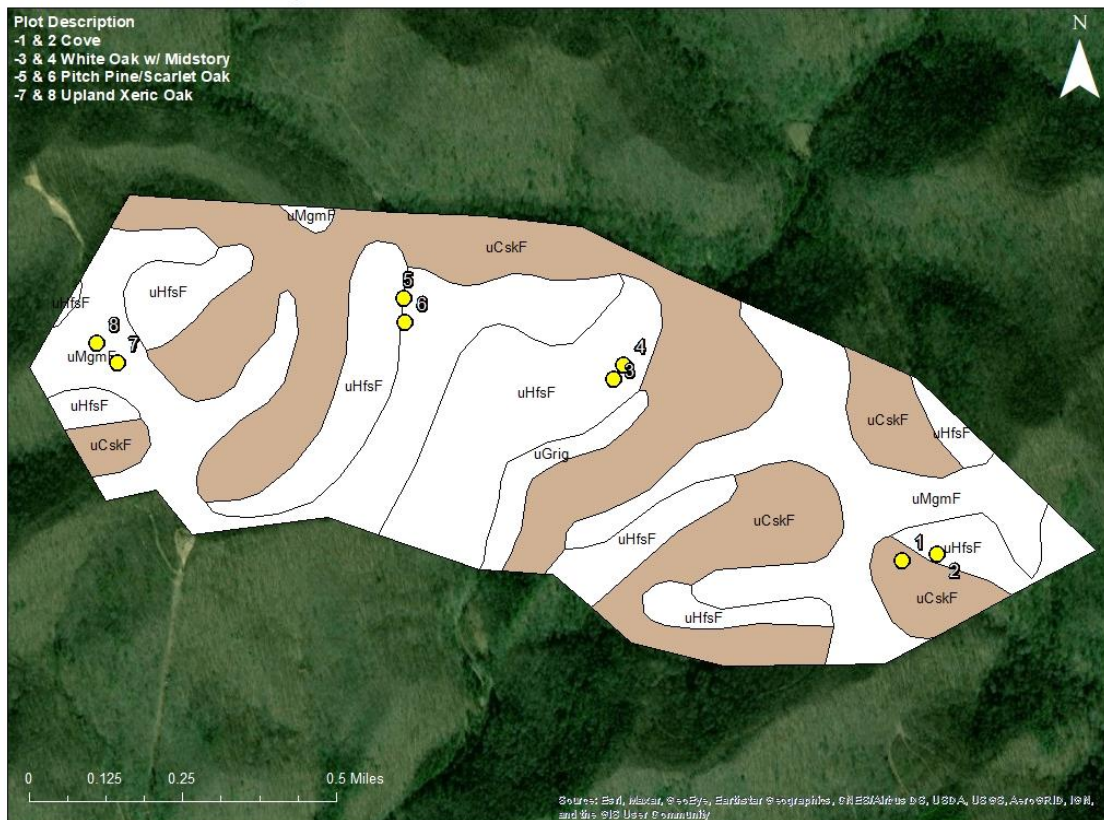
Typical profile

- *O_i* - 0 to 2 inches: very channery slightly decomposed plant material
- *A* - 2 to 8 inches: very channery loam
- *BA* - 8 to 13 inches: channery loam
- *Bw₁* - 13 to 27 inches: channery loam
- *Bw₂* - 27 to 41 inches: channery loam
- *Bw₃* - 41 to 52 inches: very channery loam
- *C₁* - 52 to 64 inches: very channery fine sandy loam
- *C₂* - 64 to 75 inches: very channery loam
- *R* - 75 to 85 inches: bedrock

Properties and qualities

- *Slope*: 20 to 80 percent
- *Surface area covered with cobbles, stones or boulders*: 1.0 percent
- *Depth to restrictive feature*: 65 to 80 inches to lithic bedrock
- *Drainage class*: Well drained
- *Runoff class*: Medium
- *Capacity of the most limiting layer to transmit water (K_{sat})*: Moderately low to moderately high (0.06 to 0.20 in/hr)
- *Depth to water table*: More than 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water capacity*: Moderate (about 6.4 inches)

Robinson Forest - Soil Map - uCskf



uMgmF—Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky

Map Unit Setting

- *National map unit symbol:* 2yksr
- *Elevation:* 800 to 2,300 feet
- *Mean annual precipitation:* 28 to 55 inches
- *Mean annual air temperature:* 39 to 67 degrees F
- *Frost-free period:* 140 to 210 days
- *Farmland classification:* Not prime farmland

Setting

- *Landform:* Ridges
- *Landform position (three-dimensional):* Mountaintop
- *Down-slope shape:* Convex
- *Across-slope shape:* Linear
- *Parent material:* Loamy-skeletal residuum weathered from sandstone

Description of Matewan, Very Stony

Typical profile

- *O_i - 0 to 1 inches:* very channery moderately decomposed plant material
- *A - 1 to 4 inches:* very channery sandy loam
- *BA - 4 to 8 inches:* very channery sandy loam
- *B_w - 8 to 30 inches:* extremely channery loam
- *C - 30 to 33 inches:* extremely flaggy loam
- *R - 33 to 43 inches:* bedrock

Properties and qualities

- *Slope:* 12 to 80 percent
- *Surface area covered with cobbles, stones or boulders:* 1.0 percent
- *Depth to restrictive feature:* 32 to 40 inches to lithic bedrock
- *Drainage class:* Well drained
- *Runoff class:* Medium
- *Capacity of the most limiting layer to transmit water (K_{sat}):* Very low to moderately low (0.00 to 0.01 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water capacity:* Very low (about 1.5 inches)

Description of Gilpin, Very Stony

Typical profile

- *O_i - 0 to 1 inches:* channery slightly decomposed plant material
- *A - 1 to 5 inches:* channery silt loam
- *B_{t1} - 5 to 11 inches:* channery silt loam
- *B_{t2} - 11 to 20 inches:* channery silt loam
- *B_{t3} - 20 to 28 inches:* channery loam
- *R - 28 to 38 inches:* bedrock

Properties and qualities

- *Slope:* 12 to 80 percent
- *Surface area covered with cobbles, stones or boulders:* 1.0 percent
- *Depth to restrictive feature:* 24 to 40 inches to lithic bedrock
- *Drainage class:* Well drained
- *Runoff class:* High
- *Capacity of the most limiting layer to transmit water (K_{sat}):* Very low to moderately low (0.00 to 0.01 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water capacity:* Low (about 4.3 inches)

Description of Marrowbone, Very Stony

Typical profile

- *Oi* - 0 to 1 inches: slightly decomposed plant material
- *A* - 1 to 5 inches: fine sandy loam
- *Bw1* - 5 to 10 inches: loam
- *Bw2* - 10 to 17 inches: fine sandy loam
- *Bw3* - 17 to 23 inches: loam
- *BC* - 23 to 28 inches: channery loam
- *R* - 28 to 38 inches: bedrock

Properties and qualities

- *Slope*: 12 to 80 percent
- *Surface area covered with cobbles, stones or boulders*: 1.0 percent
- *Depth to restrictive feature*: 24 to 32 inches to lithic bedrock
- *Drainage class*: Well drained
- *Runoff class*: Medium
- *Capacity of the most limiting layer to transmit water (Ksat)*: Moderately low to moderately high (0.06 to 0.20 in/hr)
- *Depth to water table*: More than 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water capacity*: Low (about 5.1 inches)

Robinson Forest - Soil Map - uMgmF



uHfsF—Handshoe-Feds creek-Shelocla complex, 30 to 80 percent slopes, very stony

Map Unit Setting

- *National map unit symbol:* 2x5j1
- *Elevation:* 550 to 1,850 feet
- *Mean annual precipitation:* 28 to 58 inches
- *Mean annual air temperature:* 39 to 67 degrees F
- *Frost-free period:* 140 to 222 days
- *Farmland classification:* Not prime farmland

Setting

- *Landform:* Hillslopes
- *Landform position (two-dimensional):* Backslope
- *Landform position (three-dimensional):* Side slope
- *Down-slope shape:* Concave
- *Across-slope shape:* Linear
- *Parent material:* Loamy-skeletal colluvium derived from sandstone and shale

Description of Handshoe, Very Stony

Typical profile

- *O_i - 0 to 2 inches:* very channery slightly decomposed plant material
- *A - 2 to 9 inches:* very channery loam
- *E - 9 to 16 inches:* very channery loam
- *Bw₁ - 16 to 34 inches:* very channery sandy loam
- *Bw₂ - 34 to 50 inches:* very channery loam
- *Bw₃ - 50 to 61 inches:* channery loam
- *BC - 61 to 80 inches:* very channery sandy loam

Properties and qualities

- *Slope:* 30 to 80 percent
- *Surface area covered with cobbles, stones or boulders:* 2.0 percent
- *Depth to restrictive feature:* More than 80 inches
- *Drainage class:* Well drained
- *Runoff class:* Medium
- *Capacity of the most limiting layer to transmit water (K_{sat}):* Moderately high to high (0.20 to 2.00 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water capacity:* Low (about 5.1 inches)

Description of Feds creek, Very Stony

Typical profile

- *O_i - 0 to 1 inches:* channery slightly decomposed plant material
- *A - 1 to 4 inches:* channery loam
- *BA - 4 to 8 inches:* channery silt loam
- *Bw₁ - 8 to 17 inches:* channery loam
- *Bw₂ - 17 to 30 inches:* channery loam
- *Bw₃ - 30 to 39 inches:* channery loam
- *Bw₄ - 39 to 48 inches:* channery loam
- *C₁ - 48 to 60 inches:* very channery loam
- *C₂ - 60 to 65 inches:* channery silt loam
- *R - 65 to 75 inches:* bedrock

Properties and qualities

- *Slope:* 30 to 80 percent
- *Surface area covered with cobbles, stones or boulders:* 2.0 percent
- *Depth to restrictive feature:* 62 to 70 inches to lithic bedrock
- *Drainage class:* Well drained
- *Runoff class:* Medium
- *Capacity of the most limiting layer to transmit water (K_{sat}):* Very low to moderately low (0.00 to 0.01 in/hr)
- *Depth to water table:* More than 80 inches
- *Frequency of flooding:* None
- *Frequency of ponding:* None
- *Available water capacity:* Moderate (about 8.2 inches)

Description of **Shelocta**, Very Stony

Typical profile

- *O_i* - 0 to 1 inches: slightly decomposed plant material
- *A* - 1 to 3 inches: silt loam
- *BA* - 3 to 7 inches: loam
- *Bt1* - 7 to 23 inches: channery silt loam
- *2Bt2* - 23 to 34 inches: channery silt loam
- *2Bt3* - 34 to 45 inches: very channery silt loam
- *2C* - 45 to 59 inches: very parachannery silt loam
- *2Cr* - 59 to 69 inches: bedrock

Properties and qualities

- *Slope*: 30 to 80 percent
- *Surface area covered with cobbles, stones or boulders*: 2.0 percent
- *Depth to restrictive feature*: 48 to 65 inches to paralithic bedrock
- *Drainage class*: Well drained
- *Runoff class*: High
- *Capacity of the most limiting layer to transmit water (K_{sat})*: Very low (0.00 to 0.00 in/hr)
- *Depth to water table*: More than 80 inches
- *Frequency of flooding*: None
- *Frequency of ponding*: None
- *Available water capacity*: Moderate (about 7.9 inches)

Robinson Forest - Soil Map - uHfsF



Tables — Forest Productivity (Tree Site Index): white oak (Carmean 1971, 1972 (804)) — Summary By Map Unit

Summary by Map Unit — Breathitt County, Kentucky (KY025)				
Map unit symbol	Map unit name	Rating (feet)	Acres in AOI	Percent of AOI
uCskF	Cloverlick-Shelocta-Kimper complex, 20 to 80 percent slopes, very stony	85	129.8	39.6%
uGrig	Grigsby fine sandy loam, 0 to 3 percent slopes, frequently flooded	85	6.4	2.0%
uHfsF	Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony	77	87.9	26.8%
uMgmF	Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky	70	103.5	31.6%
Totals for Area of Interest			327.6	100.0%

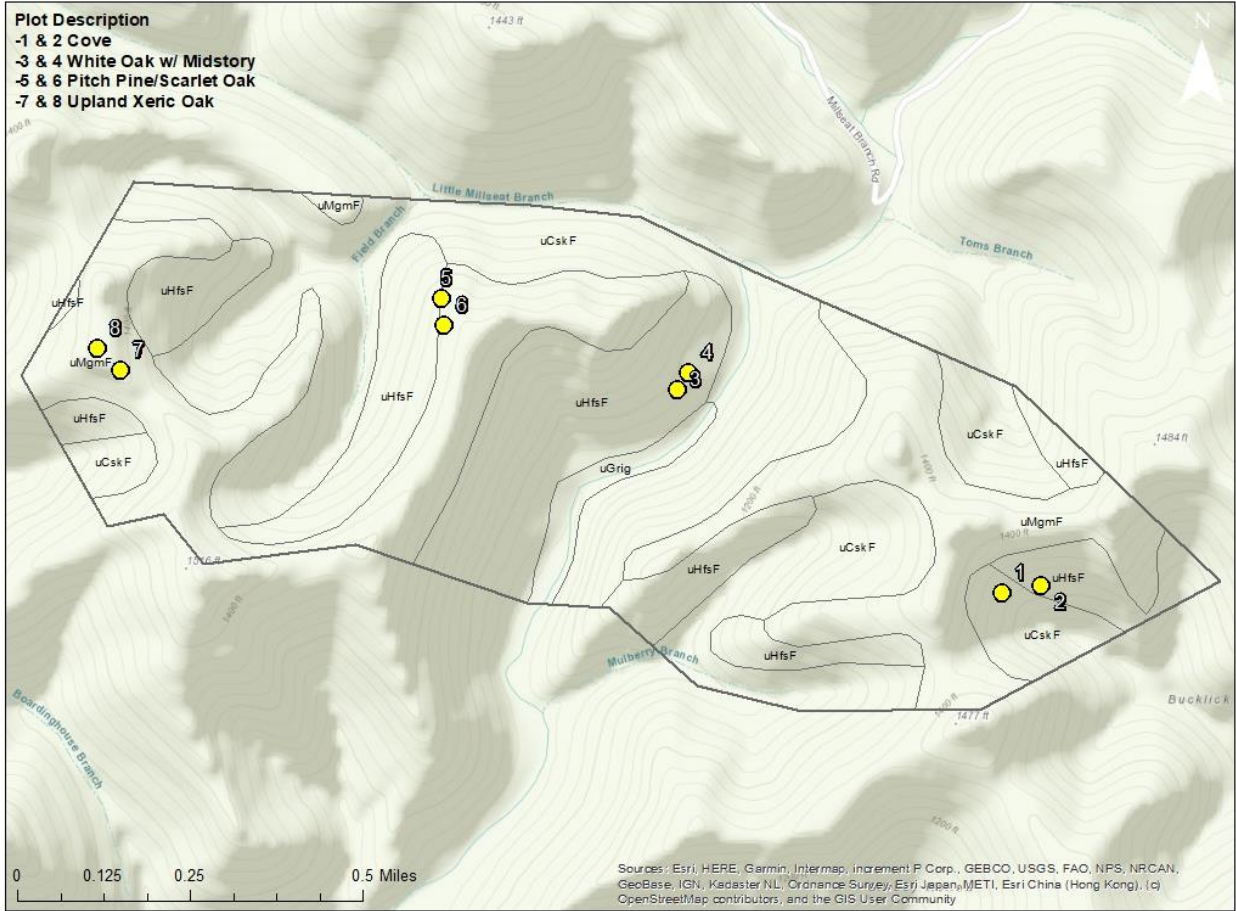
Tables — pH (1 to 1 Water) — Summary By Map Unit

Summary by Map Unit — Breathitt County, Kentucky (KY025)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
uCskF	Cloverlick-Shelocta-Kimper complex, 20 to 80 percent slopes, very stony	4.8	129.8	39.6%
uGrig	Grigsby fine sandy loam, 0 to 3 percent slopes, frequently flooded	5.6	6.4	2.0%
uHfsF	Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony	5.0	87.9	26.8%
uMgmF	Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky	4.1	103.5	31.6%
Totals for Area of Interest			327.6	100.0%

Tables — Soil Health - Organic Matter — Summary By Map Unit

Map unit symbol	Map unit name	Rating (percent)	Acres in AOI	Percent of AOI
uCskF	Cloverlick-Shelocta-Kimper complex, 20 to 80 percent slopes, very stony	2.24	129.8	39.6%
uGrig	Grigsby fine sandy loam, 0 to 3 percent slopes, frequently flooded	0.52	6.4	2.0%
uHfsF	Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony	2.39	87.9	26.8%
uMgmF	Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky	3.22	103.5	31.6%
Totals for Area of Interest			327.6	100.0%

Robinson Forest - Topographic - Soil Map



<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>