

From: [Endries, Mark](#)
To: [Marshall, Michael E](#); [Reid, Rebekah N](#)
Subject: Figure 2 Draft
Date: Wednesday, January 31, 2018 11:21:42 AM
Attachments: [Figure2.png](#)
Importance: High

Hi All,

Have a look at the first draft of Figure 2. Comments/improvements encouraged.

I used colors to differentiate between the county groupings. All naniflora occupied counties are cool blue/purple colors. Then I just used other colors to easily visually differentiate between the other groupings.

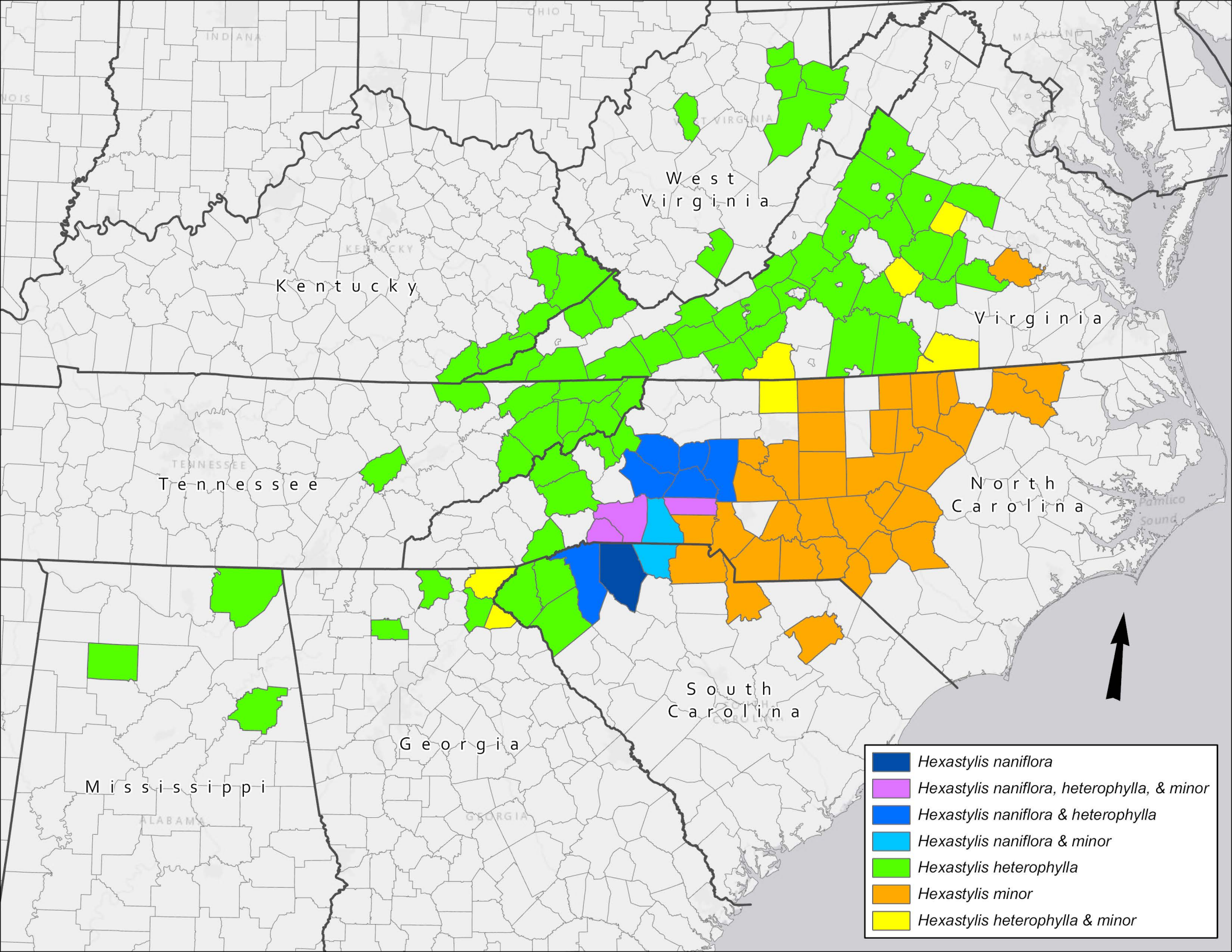
I also removed the bolder coastal boundaries, but kept the bolder interior state lines. You can still tell the state outlines but the jagged coast does not get overly dark/bold (compare with the original image).

Thanks!

Mark

Mark Endries

USFWS
160 Zillicoa St
Asheville, NC 28801
Office: 828.258.3939 ext. 231
Mobile: 828.215.1740



From: [Marshall, Michael E](#)
To: [Endries, Mark](#)
Cc: [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Wednesday, January 31, 2018 11:40:30 AM
Importance: High

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Mike Marshall
SSA Program Specialist
U.S. Fish and Wildlife Service Region 4
Cell: 512-461-6217
Alternate email: mmarshall@ag.tamu.edu

Work Schedule 1st Week

Monday-Thursday --> In Office 7:30-4:30 CST

Work Schedule 2nd Week

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From: [Endries, Mark](#)
To: [Marshall, Michael E](#)
Cc: [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Thursday, February 1, 2018 7:54:44 AM
Importance: High

Hi Guys,

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From: [Reid, Rebekah N](#)
To: [Endries, Mark](#)
Cc: [Marshall, Michael E](#)
Subject: Re: Figure 2 Draft
Date: Thursday, February 1, 2018 8:03:38 AM
Importance: High

Mark,

Those are the ones I was thinking about. I haven't seen anything else in the literature except more broad descriptions.

Thanks.

Rebekah Reid

US Fish and Wildlife Service
Asheville Ecological Services Field Office
160 Zillicoa St.
Asheville, NC 28801
phone: 828-258-3939 x238
cell: 828-782-0090

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From: [Endries, Mark](#)
To: [Marshall, Michael E](#)
Cc: [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Thursday, February 1, 2018 8:14:59 AM
Attachments: [SSURGO_HENA.xlsx](#)
Importance: High

Hello Again!

I'll include this spreadsheet, which Rebekah has seen already. If you look at the spreadsheet you'll see there are a lot of variations on the preferred soil types listed. Should I lump these? Split these? We could also wait and see what the Maxent model says with regards to soils as well.

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The attachment has been provided separately in original spreadsheet format, file name: 20180201081459_Re_ Figure 2 Draft_SSURGO_HENA.xlsx

From: [Endries, Mark](#)
To: [Marshall, Michael E](#)
Cc: [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Thursday, February 1, 2018 8:40:24 AM
Attachments: [SoilOccurrence.xlsx](#)
Importance: High

Hello Again Again,

Here is a pivot table showing where the EO points plot with respect to SSURGO MapUnit Name. It's all over the place, but there are some spikes.

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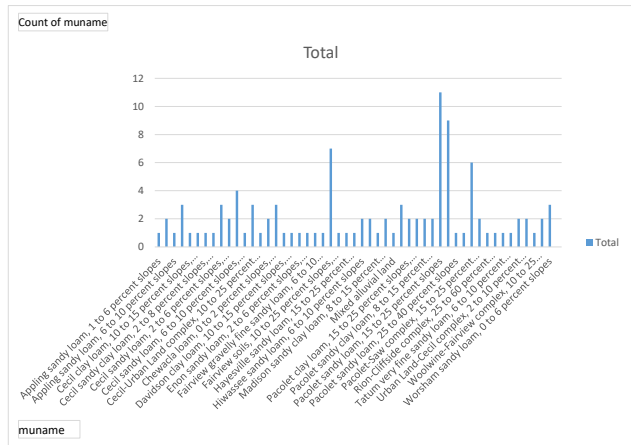
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Row Labels	Count of muname
Appling sandy loam, 1 to 6 percent slopes	1
Appling sandy loam, 2 to 6 percent slopes	2
Appling sandy loam, 6 to 10 percent slopes	1
Cartecay and Toccoa soils	3
Cecil clay loam, 10 to 15 percent slopes, severely eroded	1
Cecil clay loam, 6 to 10 percent slopes, severely eroded	1
Cecil sandy clay loam, 2 to 8 percent slopes, moderately eroded	1
Cecil sandy loam, 10 to 15 percent slopes	1
Cecil sandy loam, 2 to 6 percent slopes, eroded	3
Cecil sandy loam, 6 to 10 percent slopes	2
Cecil sandy loam, 6 to 10 percent slopes, eroded	4
Cecil-Bethlehem complex, 10 to 15 percent slopes, moderately eroded	1
Cecil-Urban Land complex, 10 to 25 percent slopes, moderately eroded	3
Chewacla loam, 0 to 2 percent slopes, frequently flooded	1
Chewacla loam, 0 to 2 percent slopes, occasionally flooded	2
Congaree soils	3
Davidson clay loam, 10 to 15 percent slopes, severely eroded	1
Davidson sandy clay loam, 10 to 15 percent slopes, eroded	1
Enon sandy loam, 2 to 6 percent slopes, eroded	1
Fairview clay loam, 10 to 25 percent slopes, severely eroded	1
Fairview gravelly fine sandy loam, 6 to 10 percent slopes	1
Fairview sandy clay loam, 8 to 15 percent slopes, moderately eroded	1
Fairview soils, 10 to 25 percent slopes, moderately eroded	7
Fairview-Stott Knob complex, 25 to 45 percent slopes	1
Hayesville sandy loam, 15 to 25 percent slopes	1
Hibriten very cobbly sandy loam, 15 to 60 percent slopes	1
Hiwassee sandy loam, 6 to 10 percent slopes	2
Madison and Cecil sandy loams, 15 to 25 percent slopes	2
Madison sandy clay loam, 8 to 15 percent slopes, moderately eroded	1
Meadowfield-Rhodhiss complex, 25 to 60 percent slopes, very stony	2
Mixed alluvial land	1
Mixed alluvial land, wet	3
Pacolet clay loam, 15 to 25 percent slopes, severely eroded	2
Pacolet sandy clay loam, 15 to 25 percent slopes, moderately eroded	2
Pacolet sandy clay loam, 8 to 15 percent slopes, eroded	2
Pacolet sandy clay loam, 8 to 15 percent slopes, moderately eroded	2
Pacolet sandy loam, 15 to 25 percent slopes	11
Pacolet sandy loam, 15 to 25 percent slopes, eroded	9
Pacolet sandy loam, 25 to 40 percent slopes	1
Pacolet-Bethlehem complex, 15 to 25 percent slopes, stony	1
Pacolet-Saw complex, 15 to 25 percent slopes, stony	6
Rhodhiss-Bannertown complex, 25 to 50 percent slopes	2
Rion-Cliffside complex, 25 to 60 percent slopes, very stony	1
Tatum gravelly loam, 2 to 8 percent slopes	1
Tatum very fine sandy loam, 6 to 10 percent slopes, eroded	1
Udorthents, loamy	1
Urban Land-Cecil complex, 2 to 10 percent slopes	2
Water	2
Woolwine-Fairview complex, 10 to 25 percent slopes, moderately eroded	1
Woolwine-Fairview complex, 8 to 15 percent slopes, moderately eroded	2
Worsham sandy loam, 0 to 6 percent slopes	3
(blank)	
Grand Total	109



muname
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From: [Endries, Mark](#)
To: [Marshall, Michael E](#)
Cc: [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Thursday, February 1, 2018 8:52:34 AM
Attachments: [SoilArea_FromEOs.xlsx](#)
Importance: High

Hello Again Again Again,

One last table to chew on regarding soils. For this one I took the polygon EO's, removed the poor accuracy ones (big circles) and clipped the soils using the refined polygon EO dataset. The table reports the acres of each soil Map Unit Name that comprise the EO polygon areas.

Thanks!

Mark

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Work Schedule 2nd Week

Monday-Thursday --> In Office 7:30-4:30 CST

This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act and may be disclosed to third parties.

muname	Shape_Area	Acres
Meadowfield-Rhodhiss complex, 25 to 60 percent slopes, very stony	482819.88	119.31
Pacolet sandy loam, 15 to 25 percent slopes	368454.24	91.05
Pacolet-Saw complex, 15 to 25 percent slopes, stony	338139.78	83.56
Rion-Cliffside complex, 25 to 60 percent slopes, very stony	310463.33	76.72
Pacolet-Bethlehem complex, 15 to 25 percent slopes, eroded	220964.11	54.60
Pacolet-Bethlehem complex, 15 to 25 percent slopes, moderately eroded	198231.07	48.98
Woolwine-Fairview complex, 8 to 15 percent slopes, moderately eroded	149653.86	36.98
Pacolet sandy clay loam, 8 to 15 percent slopes, moderately eroded	146142.18	36.11
Chewacla loam, 0 to 2 percent slopes, frequently flooded	138661.04	34.26
Pacolet sandy clay loam, 15 to 25 percent slopes, eroded	137644.07	34.01
Chewacla loam, 0 to 2 percent slopes, occasionally flooded	118704.32	29.33
Cecil sandy loam, 6 to 10 percent slopes, eroded	112191.54	27.72
Rhodhiss sandy loam, 25 to 45 percent slopes	105954.69	26.18
Mixed alluvial land, wet	104485.43	25.82
Pacolet sandy loam, 15 to 25 percent slopes, eroded	103910.51	25.68
Woolwine-Fairview complex, 15 to 25 percent slopes, moderately eroded	101805.91	25.16
Urban Land-Cecil complex, 2 to 10 percent slopes	100924.89	24.94
Woolwine-Fairview complex, 10 to 25 percent slopes, moderately eroded	100087.25	24.73
Pacolet-Bethlehem complex, 8 to 15 percent slopes, moderately eroded	99785.31	24.66
Toccoa loam, 0 to 2 percent slopes, occasionally flooded	84893.00	20.98
Fairview soils, 10 to 25 percent slopes, moderately eroded	78962.91	19.51
Cecil sandy loam, 10 to 15 percent slopes, eroded	77457.63	19.14
Pacolet-Bethlehem complex, 15 to 25 percent slopes, stony	72143.80	17.83
Madison-Bethlehem complex, 10 to 25 percent slopes, moderately eroded	71906.93	17.77
Fairview fine sandy loam, 25 to 45 percent slopes	69427.64	17.16
Pacolet sandy clay loam, 8 to 15 percent slopes, eroded	64276.42	15.88
Cecil sandy loam, 6 to 10 percent slopes	62944.53	15.55
Worsham sandy loam, 0 to 6 percent slopes	59686.25	14.75
Fairview fine sandy loam, 15 to 25 percent slopes	57773.33	14.28
Cecil sandy loam, 2 to 6 percent slopes, eroded	54869.69	13.56
Pacolet clay loam, 15 to 25 percent slopes, severely eroded	51982.67	12.85
Cecil sandy loam, 10 to 15 percent slopes	51070.35	12.62
Hulett gravelly sandy loam, 8 to 15 percent slopes, stony	49642.31	12.27
Cecil-Urban Land complex, 10 to 25 percent slopes, moderately eroded	48414.13	11.96
Rion sandy loam, 25 to 45 percent slopes	48084.05	11.88
Fairview sandy clay loam, 8 to 15 percent slopes, moderately eroded	45455.01	11.23
Udorthents, loamy	45187.29	11.17
Evard-Cowee complex, 30 to 50 percent slopes, stony	45033.37	11.13
Pacolet-Bethlehem complex, 8 to 15 percent slopes, eroded	42936.35	10.61
Pacolet-Saw complex, 8 to 15 percent slopes, moderately eroded	42595.20	10.53
Grover gravelly sandy loam, 15 to 30 percent slopes, rocky	42457.39	10.49
Woolwine-Fairview-Westfield complex, 25 to 45 percent slopes, stony	41791.77	10.33
Hiwassee sandy loam, 6 to 10 percent slopes	41152.52	10.17
Cecil clay loam, 10 to 15 percent slopes, severely eroded	39073.84	9.66
Appling sandy loam, 2 to 6 percent slopes	37098.02	9.17
Congaree loam, 0 to 2 percent slopes, frequently flooded	35393.91	8.75
Cartecay and Toccoa soils	35189.51	8.70

muname	Shape_Area	Acres
Rion-Ashlar complex, 25 to 60 percent slopes, rocky	35101.71	8.67
Georgeville loam, 15 to 25 percent slopes	33531.25	8.29
Cecil sandy clay loam, 2 to 8 percent slopes, moderately eroded	33338.06	8.24
Colvard sandy loam, 0 to 3 percent slopes, occasionally flooded	32128.25	7.94
Congaree soils	31636.03	7.82
Cecil sandy loam, 2 to 6 percent slopes	29530.96	7.30
Pacolet sandy clay loam, 15 to 25 percent slopes, moderately eroded	29126.25	7.20
Appling sandy loam, 6 to 12 percent slopes	26896.56	6.65
Hayesville sandy loam, 15 to 25 percent slopes	23829.19	5.89
Pacolet soils, 10 to 25 percent slopes	23585.31	5.83
Pacolet-Saw complex, 15 to 25 percent slopes, eroded	22954.75	5.67
Cecil clay loam, 6 to 10 percent slopes, severely eroded	21940.31	5.42
Cecil-Bethlehem complex, 10 to 15 percent slopes, moderately eroded	21812.31	5.39
Water	20103.91	4.97
Pacolet sandy loam, 25 to 45 percent slopes	19988.22	4.94
Dogue-Roanoke complex, 0 to 6 percent slopes, rarely flooded	19561.94	4.83
Appling sandy loam, 1 to 6 percent slopes	19077.57	4.71
Enon sandy loam, 2 to 6 percent slopes, eroded	18997.19	4.69
Rhodhiss-Bannertown complex, 25 to 50 percent slopes	18847.64	4.66
Biltmore loamy sand, 0 to 5 percent slopes, occasionally flooded	18328.86	4.53
Madison and Cecil sandy loams, 15 to 25 percent slopes	18241.24	4.51
Appling sandy loam, 6 to 10 percent slopes	18046.50	4.46
Madison sandy clay loam, 8 to 15 percent slopes, moderately eroded	17837.84	4.41
Clifffield-Pigeonroost complex, 30 to 50 percent slopes, very stony	17131.10	4.23
Poplar Forest gravelly sandy loam, 6 to 10 percent slopes	15123.32	3.74
Davidson sandy clay loam, 10 to 15 percent slopes, eroded	14323.97	3.54
Fairview sandy loam, 15 to 25 percent slopes	14203.05	3.51
Fairview clay loam, 10 to 25 percent slopes, severely eroded	13835.25	3.42
Helena sandy loam, 1 to 6 percent slopes	13751.27	3.40
Fairview gravelly fine sandy loam, 6 to 10 percent slopes	12924.29	3.19
Pacolet sandy loam, 8 to 15 percent slopes	11567.39	2.86
Cecil-Bethlehem complex, 15 to 25 percent slopes, moderately eroded	11504.51	2.84
Meadowfield-Fairview complex, 15 to 25 percent slopes	11426.75	2.82
Helena-Worsham complex 1 to 6 percent slopes	11326.18	2.80
Cecil sandy loam, 25 to 35 percent slopes	11072.67	2.74
Helena-Worsham complex, 1 to 6 percent slopes	10354.51	2.56
Fairview sandy clay loam, 15 to 25 percent slopes, moderately eroded	9938.59	2.46
Madison and Cecil sandy loams, 25 to 35 percent slopes, eroded	9867.27	2.44
Davidson clay loam, 6 to 10 percent slopes, severely eroded	9300.86	2.30
Madison-Bethlehem complex, 8 to 15 percent slopes, very stony, moderately eroded	9286.31	2.29
Evard-Cowee complex, 15 to 30 percent slopes, stony	9152.69	2.26
Davidson clay loam, 10 to 15 percent slopes, severely eroded	9051.60	2.24
Clifford sandy loam, 8 to 15 percent slopes, moderately eroded	7711.03	1.91
Georgeville loam, 8 to 15 percent slopes	7403.98	1.83
Madison and Cecil sandy loams, 10 to 15 percent slopes, eroded	7220.22	1.78
Pacolet sandy loam, 25 to 40 percent slopes	6580.32	1.63
Codorus loam, 0 to 2 percent slopes, occasionally flooded	6357.38	1.57

muname	Shape_Area	Acres
Clifford sandy loam, 2 to 6 percent slopes	6307.45	1.56
Enon sandy loam, 10 to 15 percent slopes, eroded	6238.60	1.54
Madison and Cecil sandy loams, 2 to 6 percent slopes, eroded	6193.75	1.53
Davidson sandy clay loam, 2 to 6 percent slopes, eroded	5960.14	1.47
Codorus loam, 0 to 2 percent slopes, frequently flooded	5448.39	1.35
Tatum gravelly loam, 2 to 8 percent slopes	4845.84	1.20
Clifford sandy loam, 6 to 10 percent slopes	4815.05	1.19
Wehadkee silt loam, 0 to 2 percent slopes, frequently flooded	4663.83	1.15
Pacolet-Saw complex, 8 to 15 percent slopes, eroded	4095.74	1.01
Lloyd loam, 10 to 15 percent slopes	4023.03	0.99
Rion sandy loam, 8 to 15 percent slopes	3992.38	0.99
Clifford sandy loam, 10 to 15 percent slopes	3937.19	0.97
Rock outcrop-Ashlar complex, 2 to 15 percent slopes	3770.26	0.93
Hulett gravelly sandy loam, 2 to 8 percent slopes	3713.93	0.92
Arkaqua loam, 0 to 2 percent slopes, occasionally flooded	3674.93	0.91
Madison gravelly sandy clay loam, 8 to 15 percent slopes, moderately eroded	3536.25	0.87
Worsham fine sandy loam, 0 to 2 percent slopes	3395.01	0.84
Woolwine-Fairview complex, 2 to 8 percent slopes, moderately eroded	3392.71	0.84
Tatum gravelly loam, 15 to 25 percent slopes	2960.06	0.73
Pacolet sandy clay loam, 10 to 15 percent slopes, moderately eroded	2829.68	0.70
Cecil clay loam, 2 to 6 percent slopes, severely eroded	2776.35	0.69
Local alluvial land	2712.19	0.67
Cecil-Urban land complex, 2 to 8 percent slopes	2447.81	0.60
Fontaflora-Ostin complex, 0 to 5 percent slopes, flooded	2359.68	0.58
Pacolet clay loam, 10 to 25 percent slopes, severely eroded	2347.67	0.58
Rhodhiss sandy loam, 15 to 25 percent slopes	2292.42	0.57
Saw-Wake complex, 15 to 30 percent slopes, very rocky	2119.48	0.52
Udorthents, loamy, 0 to 15 percent slopes	1976.36	0.49
Pacolet-Madison-Urban land complex, 2 to 8 percent slopes	1878.89	0.46
Poplar Forest gravelly sandy loam, 2 to 6 percent slopes	1676.21	0.41
Pacolet-Bethlehem complex, 2 to 8 percent slopes, moderately eroded	1508.90	0.37
Poindexter-Rowan complex, 25 to 45 percent slopes	1444.95	0.36
Fairview-Stott Knob complex, 25 to 45 percent slopes	1415.89	0.35
Meadowfield-Woolwine complex, 8 to 15 percent slopes	1197.36	0.30
Buncombe loamy sand, 1 to 5 percent slopes, rarely flooded	1190.61	0.29
Madison and Cecil clay loams, 10 to 15 percent slopes, severely eroded	1010.68	0.25
Mixed alluvial land	881.19	0.22
Wehadkee loam, 0 to 2 percent slopes, frequently flooded	768.31	0.19
Pacolet sandy loam, 2 to 8 percent slopes	721.60	0.18
Georgeville loam, 2 to 8 percent slopes	692.61	0.17
Clifford-Urban land complex, 8 to 15 percent slopes, moderately eroded	634.64	0.16
Hibriten very cobbly sandy loam, 15 to 60 percent slopes	540.92	0.13
Tomlin sandy clay loam, 10 to 15 percent slopes, moderately eroded	535.72	0.13
Lloyd loam, 6 to 10 percent slopes	522.27	0.13
Pacolet sandy clay loam, 2 to 8 percent slopes, moderately eroded	519.53	0.13
Poindexter-Rowan complex, 15 to 25 percent slopes	348.29	0.09
Madison gravelly sandy loam, 6 to 10 percent slopes	338.22	0.08

muname	Shape_Area	Acres
Dogue sandy loam, 2 to 8 percent slopes, rarely flooded	136.16	0.03
Hatboro loam, 0 to 2 percent slopes, frequently flooded	131.92	0.03
Cecil sandy clay loam, 2 to 8 percent slopes, eroded	79.19	0.02
Cecil clay loam, 6 to 10 percent slopes, moderately eroded	60.54	0.01
Dan River loam, 0 to 2 percent slopes, frequently flooded	49.46	0.01
Udorthents-Urban land complex, 0 to 15 percent slopes	43.81	0.01
Worsham fine sandy loam, 0 to 6 percent slopes	31.01	0.01
Clifffield-Pigeonroost complex, 15 to 30 percent slopes, very stony	26.66	0.01
Clifford sandy loam, 2 to 8 percent slopes, moderately eroded	25.26	0.01
Severely gullied land	19.40	0.00
Pacolet-Saw complex, 2 to 8 percent slopes, eroded	13.99	0.00
Lloyd loam, 2 to 6 percent slopes	11.70	0.00

From: [Marshall, Michael E](#)
To: [Endries, Mark](#)
Cc: [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Thursday, February 1, 2018 10:48:49 AM
Importance: High

Good morning!

Well....that sure is a whole lot of soil types! Seems to me there needs to be some combining....I'd like to dig a bit deeper and see what was used in the previous modelling effort.....the soil codes were reduced to about 4-5 types. Lets discuss this a bit more today.

Thanks!

Mike

On Thu, Feb 1, 2018 at 8:52 AM, Endries, Mark <mark_endries@fws.gov> wrote:

Hello Again Again Again,

One last table to chew on regarding soils. For this one I took the polygon EO's, removed the poor accuracy ones (big circles) and clipped the soils using the refined polygon EO dataset. The table reports the acres of each soil Map Unit Name that comprise the EO polygon areas.

Thanks!

Mark

Mark Endries

USFWS
160 Zillicoa St
Asheville, NC 28801
Office: 828.258.3939 ext. 231
Mobile: 828.215.1740

On Thu, Feb 1, 2018 at 8:40 AM, Endries, Mark <mark_endries@fws.gov> wrote:

Hello Again Again,

Here is a pivot table showing where the EO points plot with respect to SSURGO MapUnit Name. It's all over the place, but there are some spikes.

Thanks!

Mark

Mark Endries

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On Thu, Feb 1, 2018 at 8:14 AM, Endries, Mark <mark_endries@fws.gov> wrote:
Hello Again!

I'll include this spreadsheet, which Rebekah has seen already. If you look at the spreadsheet you'll see there are a lot of variations on the preferred soil types listed. Should I lump these? Split these? We could also wait and see what the Maxent model stays with regards to soils as well.

Thanks!

Mark

Mark Endries

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Office: 828.258.3939 ext. 231
Mobile: 828.215.1740

On Thu, Feb 1, 2018 at 7:54 AM, Endries, Mark <mark_endries@fws.gov> wrote:
Hi Guys,

Could I get a list of what we think are the "preferred soil types"? The document lists this:

The species appears to be restricted to Pacolet sandy loam, Madison gravelly sandy loam, and Musella fine sandy loam soils (Gaddy 1981,1987).

Is this what we are talking about, or are there others?

Thanks!

Mark

Mark Endries

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On Wed, Jan 31, 2018 at 11:40 AM, Marshall, Michael <michael_marshall@fws.gov> wrote:

I think it looks great! Thanks Mark!

Will be interesting to consider and figure out what to do with Matt Estep's comment and recent genetic analyses suggesting a possible new species in the north portion....the species has not been described, and morphological analyses are underway....for now, my thoughts are that we go with the best available current science, suggesting a new species is yet to be confirmed, so we go with the 12 county range. We can discuss tomorrow.

Thanks,

Mike

On Wed, Jan 31, 2018 at 11:21 AM, Endries, Mark <mark_endries@fws.gov> wrote:

Hi All,

Have a look at the first draft of Figure 2. Comments/improvements encouraged.

I used colors to differentiate between the county groupings. All naniflora occupied counties are cool blue/purple colors. Then I just used other colors to easily visually differentiate between the other groupings.

I also removed the bolder coastal boundaries, but kept the bolder interior state lines. You can still tell the state outlines but the jagged coast does not get overly dark/bold (compare with the original image).

Thanks!

Mark

Mark Endries

USFWS

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Mike Marshall

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From: [Endries, Mark](#)
To: [Marshall, Michael E](#); [Reid, Rebekah N](#)
Subject: Re: Figure 2 Draft
Date: Friday, February 2, 2018 10:34:19 AM
Attachments: [DistributionMap.png](#)
Importance: High

Hi All,

We noticed a missed naniflora county which was previously listed as just minor. I've updated the distribution map to correct this.

Thanks!

Mark

Mark Endries

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On Wed, Jan 31, 2018 at 11:21 AM, Endries, Mark <mark_endries@fws.gov> wrote:

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Thanks!

Mark

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