Soil Survey Evaluation for Bennington County, VT
Vermont NRCS
2010

This report contains general information about the history of the soil survey and an evaluation of the available soil survey information, for use in planning for maintenance and updates to the soil survey.

1. General Information

A. State Soil Survey Area ID (STSSAID)	VT003
B. Acres (from NRI)	
Total land acres in the survey area	433,000
Total census water in the survey area	500
Total Surface area	433,500
Approximate acres within MLRA 143 (as of 1996)	231,300
Approximate acres within MLRA 144A (as of 1996)	202,200
Approximate acres within the Green Mountain National Forest (GMNF)	132,000

Correlation

A. Correlation date	1990
B. Correlation Amendment Dates	
First	8/97

Initial Soil survey

A. Publication date	2006
B. Publication scale	1:24,000
C. Photobase	Orthophoto, NRCS
D. Mapping order	2 (3 in GMNF)
E. Field Mapping scale	1:18,000 to 1:20,000 outside of GMNF
F. Field Mapping	
Started	1958
Completed	1985
G. Soil Survey Status	Initial

Digital Soil Survey

A. Date survey digitized	1993-1996
B. Digitizing base map	Orthophotos, VT
C. Digitizing scale	1:20,000
F. Date of SSURGO Certification	1997

2. Quality of the Existing Soil Survey

Published Soil Survey

This is a current soil survey. The mapping quality meets current standards. Mapping in the Green Mountain National Forest is at Order 3 level, conforming to the Ecological Land Type mapping done by the US Forest Service.

Soil Maps

Officially certified soil maps derived from SSURGO data are available on: 1) the Web Soil Survey, 2) the Soil Data Mart, 3) a CD produced by the VT NRCS Soils Staff and, 4) paper copies available at the local field office.

Taxonomic and Map Unit Names and Descriptions

The following soils were classified as Orthods (Spodosol order) in Bennington County: Hogback, Houghtonville, Mundal, Rawsonville, and Wilmington. Some of these soils may now fit the classification criteria for Humods.

Map Unit Issues and Concerns by MLRA – see legend below for individual map units

MLRA 143

143-B. Brayton map units were restricted to MLRA 144A in this county. No acres were mapped in MLRA 143. One Cabot map unit was mapped in similar landscapes in MLRA 143.

143-ELO. This map unit was arbitrarily mapped starting at 2000 ft. elevation in the Green Mountains in the county. Its actual extent may be much more limited in the region. Other soil series may make up a significant percentage of this unit.

143-ELU. This map unit was arbitrarily restricted to elevations less than 2000 ft. in the Green Mountains in the county. There may be significant mappable areas above 2000 feet in this region that were included with other soils.

143-SK. This map unit may contain very skeletal soils high in white quartzite from the Cheshire formation in areas along the western flank of the Green Mountains.

143-SPR. This Spodosol series classification needs to be updated.

143-SPX. This series does not meet current taxonomic classification requirements for Spodosols.

143-T. This series was mapped throughout the county across the mesic and frigid temperature zones. It should be confined to the appropriate temperature zone within county. Other series are needed on the legend to map in other temperature zone areas. Related to this issue, in some counties, some series are mapped only in the mesic region, but are now classified as having a frigid temperature class.

MLRA 144A

144A-B. Brayton map units were restricted to MLRA 144B in this county. No acres were mapped in MLRA 143. One Cabot map unit was mapped in similar landscapes in MLRA 143.

144A-C. This series and map unit are part of a catena mapped in Bennington and Rutland counties with both mesic and frigid temperature class soils: Hubbardton, Macomber, and Taconic soils are frigid; Dutchess and Pittstown soils (and Bomoseen soils in Rutland county) are mesic. Need to re-correlate the soils in this catena to fit within one temperature class. Soils in this catena join mesic soils in New York and Addison county.

144A-FL. This mesic limestone bedrock unit may include mappable inclusions of frigid temperature class soils at higher elevations in the Taconic Mountains and along the western edge of the Green Mountains.

144A-MF. This mesic floodplain unit was mapped throughout the county across the mesic and frigid temperature zones. In addition, soil series in other textural families besides coarse-silty were included in this unit. They were not mapped in the county, although they were mapped in nearby counties.

144A-MFL. This mesic floodplain unit was mapped throughout the county across the mesic and frigid temperature zones.

144A-SL. Out of date slope classes were used for this map unit. They have poor interpretative value.

144A-T. This series was mapped throughout the county across the mesic and frigid temperature zones. It should be confined to the appropriate temperature zone within county. Other series are needed on the legend to map in other temperature zone areas. Related to this issue, in some counties, some series are mapped only in the mesic region, but are now classified as having a frigid temperature class.

144A-UL. A significant number of delineations of these consociations of soil series include large areas of urban and built-up land that could be mapped as distinct Urban Land units or complexes.

144A-Y. This is the only county in the state where this series (or one of the series in a complex) is mapped.

144A-Z. This is the only map unit of this series in Vermont.

Map Unit Symbol and Name		**Map Unit Issues by MLRA-Concern Number (see above)**					
3A Copake gravelly fine sandy loam, 0 to 3 percent slopes		144A-T	144A-UL	143-T			
3B Copake gravelly fine sandy loam, 3 to 8 percent slopes		144A-T	144A-UL	143-T			

3C Copake gravelly fine sandy loam, 8 to 15 percent slopes		144A-T	143-T				
3D Copake gravelly fine sandy loam, 15 to 25 percent slopes		144A-T	143-T				
3E Copake gravelly fine sandy loam, 25 to 60 percent slopes		144A-T	143-T				
9 Pits-Dumps complex							
10D Glebe-Stratton-Londonderry complex, 15 to 25 percent slopes, very rocky		143-SPR	143-SPX				
10E Glebe-Stratton-Londonderry complex, 25 to 60 percent slopes, very rocky		143-SPR	143-SPX				
11F Taconic-Hubbardton-Rock outcrop complex, 25 to 70 percent slopes, very stony		144B-C					
18B Windsor loamy fine sand, 0 to 8 percent slopes							
18C Windsor loamy fine sand, 8 to 15 percent slopes							
18E Windsor loamy fine sand, 15 to 60 percent slopes		144A-SL					
21A Limerick silt loam, 0 to 3 percent slopes		144A-MF					
23A Adrian and Saco soils, 0 to 2 percent slopes		144A-T	143-T				
24A Carlisle mucky peat, 0 to 2 percent slopes		144A-T	143-T				
25B Belgrade silt loam, 0 to 8 percent slopes							
26A Raynham silt loam, 0 to 3 percent slopes							
27B Udipsamments and Udorthents, gently sloping							
28A Udifluvents, loamy-skeletal							
29A Occum fine sandy loam, 0 to 3 percent slopes		144A-MFL	144A-UL				
34A Pootatuck fine sandy loam, 0 to 3 percent slopes		144A-MFL	144A-UL				
35B Hartland silt loam, 0 to 5 percent slopes		144A-SL					

40B Galway-Nellis-Farmington complex, 3 to 8 percent slopes, rocky							
40C Galway-Nellis-Farmington complex, 8 to 15 percent slopes, rocky							
40D Galway-Nellis-Farmington complex, 15 to 25 percent slopes, rocky							
41C Galway-Farmington complex, 8 to 15 percent slopes, very rocky		144A-FL					
41D Galway-Farmington complex, 15 to 25 percent slopes, very rocky		144A-FL					
41E Galway-Farmington complex, 25 to 50 percent slopes, very rocky		144A-FL					
42C Macomber-Taconic complex, 8 to 15 percent slopes, rocky		144A-C					
42D Macomber-Taconic complex, 15 to 25 percent slopes, rocky		144A-C					
42E Macomber-Taconic complex, 25 to 60 percent slopes, rocky		144A-C					
43C Taconic-Macomber complex, 8 to 15 percent slopes, very rocky		144A-C					
43D Taconic-Macomber complex, 15 to 25 percent slopes, very rocky		144A-C					
43E Taconic-Macomber complex, 25 to 60 percent slopes, very rocky		144A-C					
44B Dutchess channery loam, 3 to 8 percent slopes		144A-C					
44C Dutchess channery loam, 8 to 15 percent slopes		144A-C					
44D Dutchess channery loam, 15 to 25 percent slopes		144A-C					

47C Dutchess channery loam, 8 to 15 percent slopes, very stony		144A-C					
47D Dutchess channery loam, 15 to 25 percent slopes, very stony		144A-C					
47E Dutchess channery loam, 25 to 60 percent slopes, very stony		144A-C					
48B Pittstown loam, 3 to 8 percent slopes		144A-C					
48C Pittstown loam, 8 to 15 percent slopes		144A-C					
48D Pittstown loam, 15 to 25 percent slopes		144A-C					
49C Pittstown loam, 8 to 15 percent slopes, very stony		144A-C					
49D Pittstown loam, 15 to 25 percent slopes, very stony		144A-C					
50B Brayton loam, 0 to 5 percent slopes		144A-B	144A-SL				
51B Brayton loam, 0 to 5 percent slopes, very stony		144A-B	144A-SL				
52A Mansfield mucky silt loam, 0 to 3 percent slopes, very stony		144A-T	143-T	144A-Z			
64B Stockbridge loam, 2 to 8 percent slopes		144A-SL					
64C Stockbridge loam, 8 to 15 percent slopes							
64D Stockbridge loam, 15 to 25 percent slopes							
65C Stockbridge loam, 8 to 15 percent slopes, very stony							
65D Stockbridge loam, 15 to 25 percent slopes, very stony							
66A Georgia loam, 0 to 3 percent slopes							
66B Georgia loam, 3 to 8 percent slopes							
66C Georgia loam, 8 to 15 percent slopes							
66D Georgia loam, 15 to 25 percent slopes							

67B Georgia loam, 3 to 8 percent slopes, very stony							
67C Georgia loam, 8 to 15 percent slopes, very stony							
68A Massena silt loam, 0 to 3 percent slopes							
68B Massena silt loam, 3 to 8 percent slopes							
69A Massena silt loam, 0 to 3 percent slopes, very stony							
69B Massena silt loam, 3 to 8 percent slopes, very stony							
70A Groton gravelly fine sandy loam, 0 to 3 percent slopes							
70B Groton gravelly fine sandy loam, 3 to 8 percent slopes							
70C Groton gravelly fine sandy loam, 8 to 15 percent slopes							
70D Groton gravelly fine sandy loam, 15 to 25 percent slopes							
70E Groton gravelly fine sandy loam, 25 to 60 percent slopes							
71A Hero gravelly fine sandy loam, 0 to 3 percent slopes		144A-T	143-T				
71B Hero gravelly fine sandy loam, 3 to 8 percent slopes		144A-T	143-T				
72A Fredon fine sandy loam, 0 to 3 percent slopes		144A-T	143-T				
84B Nellis silt loam, 3 to 8 percent slopes							
84C Nellis silt loam, 8 to 15 percent slopes							
84D Nellis silt loam, 15 to 25 percent slopes							
85B Nellis silt loam, 3 to 8 percent slopes, very stony							
85C Nellis silt loam, 8 to 15 percent slopes, very stony							
85D Nellis silt loam, 15 to 25 percent slopes, very stony							
85E Nellis silt loam, 25 to 50 percent slopes, very stony							

86A Amenia silt loam, 0 to 3 percent slopes							
86B Amenia silt loam, 3 to 8 percent slopes							
86C Amenia silt loam, 8 to 15 percent slopes							
87B Amenia silt loam, 3 to 8 percent slopes, very stony							
87C Amenia silt loam, 8 to 15 percent slopes, very stony							
90C Berkshire fine sandy loam, 3 to 15 percent slopes, extremely stony		143-ELU	143-SK				
90E Berkshire fine sandy loam, 15 to 50 percent slopes, extremely stony		143-ELU	143-SK				
93B Pittsfield fine sandy loam, 3 to 8 percent slopes		144A-UL	144A-Y				
93C Pittsfield fine sandy loam, 8 to 15 percent slopes		144A-Y					
93D Pittsfield fine sandy loam, 15 to 25 percent slopes		144A-Y					
94B Pittsfield fine sandy loam, 3 to 8 percent slopes, very stony		144A-Y					
94C Pittsfield fine sandy loam, 8 to 15 percent slopes, very stony		144A-Y					
94D Pittsfield fine sandy loam, 15 to 25 percent slopes, very stony		144A-Y					
94E Pittsfield fine sandy loam, 25 to 50 percent slopes, very stony		144A-Y					
95C Houghtonville fine sandy loam, 8 to 15 percent slopes, very stony		143-ELO	143-SK				
95D Houghtonville fine sandy loam, 15 to 25 percent slopes, very stony		143-ELO	143-SK				
95E Houghtonville fine sandy loam, 25 to 60 percent slopes, very stony		143-ELO	143-SK				

96D Hogback-Rawsonville-Rock outcrop complex, 15 to 25 percent slopes, very stony		143-ELO					
96F Hogback-Rawsonville-Rock outcrop complex, 25 to 70 percent slopes, very stony		143-ELO					
100B Wilmington fine sandy loam, 0 to 8 percent slopes, very stony		143-ELO					
102B Mundal fine sandy loam, 3 to 8 percent slopes		143-ELO					
102C Mundal fine sandy loam, 8 to 15 percent slopes		143-ELO					
104B Colton gravelly loamy sand, 3 to 8 percent slopes, extremely stony							
104C Colton gravelly loamy sand, 8 to 15 percent slopes, extremely stony							
104E Colton gravelly loamy sand, 15 to 50 percent slopes, extremely stony							
105B Monadnock fine sandy loam, 3 to 8 percent slopes, very stony		143-SK					
105C Monadnock fine sandy loam, 8 to 15 percent slopes, very stony		143-SK					
105D Monadnock fine sandy loam, 15 to 25 percent slopes, very stony		143-SK					
105E Monadnock fine sandy loam, 25 to 50 percent slopes, very stony		143-SK					
106B Berkshire fine sandy loam, 3 to 8 percent slopes, very stony		143-ELU					
106C Berkshire fine sandy loam, 8 to 15 percent slopes, very stony		143-ELU	143-SK				
106D Berkshire fine sandy loam, 15 to 25 percent slopes, very stony		143-ELU	143-SK				

106E Berkshire fine sandy loam, 25 to 50 percent slopes, very stony		143-ELU	143-SK				
108B Peru fine sandy loam, 3 to 8 percent slopes, very stony		143-ELU					
108C Peru fine sandy loam, 8 to 15 percent slopes, very stony		143-ELU					
108D Peru fine sandy loam, 15 to 25 percent slopes, very stony		143-ELU					
109C Tunbridge-Berkshire complex, 8 to 15 percent slopes, rocky		143-ELU					
109D Tunbridge-Berkshire complex, 15 to 25 percent slopes, rocky		143-ELU					
109E Tunbridge-Berkshire complex, 25 to 50 percent slopes, rocky		143-ELU					
111C Rawsonville-Houghtonville complex, 8 to 15 percent slopes, rocky		143-ELO					
111D Rawsonville-Houghtonville complex, 15 to 25 percent slopes, rocky		143-ELO					
111E Rawsonville-Houghtonville complex, 25 to 60 percent slopes, rocky		143-ELO					
112C Rawsonville-Hogback complex, 8 to 15 percent slopes, very rocky		143-ELO					
112D Rawsonville-Hogback complex, 15 to 25 percent slopes, very rocky		143-ELO					
112E Rawsonville-Hogback complex, 25 to 60 percent slopes, very rocky		143-ELO					
113B Cabot silt loam, 3 to 8 percent slopes, very stony		143-B					
114B Mundal fine sandy loam, 3 to 8 percent slopes, very stony		143-ELO					

114C Mundal fine sandy loam, 8 to 15 percent slopes, very stony		143-ELO					
114D Mundal fine sandy loam, 15 to 25 percent slopes, very stony		143-ELO					
115B Peru fine sandy loam, 3 to 8 percent slopes		143-ELU					
115C Peru fine sandy loam, 8 to 15 percent slopes		143-ELU					
115D Peru fine sandy loam, 15 to 25 percent slopes		143-ELU					
116D Lyman-Tunbridge-Rock outcrop complex, 15 to 25 percent slopes, very stony		143-ELU					
116F Lyman-Tunbridge-Rock outcrop complex, 25 to 70 percent slopes, very stony		143-ELU					
117B Berkshire fine sandy loam, 3 to 8 percent slopes		143-ELU					
117C Berkshire fine sandy loam, 8 to 15 percent slopes		143-ELU					
117D Berkshire fine sandy loam, 15 to 25 percent slopes		143-ELU					
118C Tunbridge-Lyman complex, 8 to 15 percent slopes, very rocky		143-ELU					
118D Tunbridge-Lyman complex, 15 to 25 percent slopes, very rocky		143-ELU					
118E Tunbridge-Lyman complex, 25 to 60 percent slopes, very rocky		143-ELU					
221F Tunbridge-Berkshire association, very steep, rocky		143-SK					
403B Cabot-Carlisle association, undulating, very stony							
405D Berkshire-Tunbridge association, hilly, very stony							
413D Peru-Berkshire-Cabot association, hilly, very stony							

702E Rawsonville-Hogback association, very hilly, very rocky							
703C Mundal-Houghtonville association, rolling, very stony							
705D Rawsonville-Houghtonville-Mundal association, hilly, rocky							
715D Houghtonville-Rawsonville association, hilly, rocky							
902F Hogback-Rawsonville-Rock outcrop association, very steep, very stony							
903C Mundal-Wilmington association, rolling, very stony							
905D Houghtonville-Monadnock association, hilly, very stony							
913E Glebe-Stratton association, very hilly, very rocky		143-SPR					
923B Wilmington-Mundal association, undulating, very stony							
W Water							

Interpretations
The soil survey interpretations were approved when the soil survey was correlated. Interpretations developed or revised since correlation are available in the Field Office Technical Guide, Section II Part I, Soils Information, and on the Soil Data Mart. Some interpretations are available through Soil Fact Sheets.

3. Digital Soil Survey/Tabular Soil Survey Data
SSURGO-certified data is posted to the Soil Data Mart and Web Soil Survey.

4. Plans to update the Soil Survey
This section will be completed by the MLRA Soil Survey Office after a review of county SS evaluations.

5. Staff and Budget needed to update the Soil Survey
This section will be completed by the MLRA Soil Survey Office after a review of county SS evaluations.