

**Soil Survey Evaluation for Franklin 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)	VT011
B. Acres (from NRI)	
Total land acres in the survey area	415,500
Total census water in the survey area	27,900
Total Surface area	443,400
Approximate acres within MLRA 142 (as of 1996)	144,500
Approximate acres within MLRA 143 (as of 1996)	298,900

Correlation

A. Correlation date	1976
B. Correlation Amendment Dates	
First	1976
Second	April 1999
Third	May 1999

Initial Soil Survey

A. Publication date	1979
B. Publication scale	1:20,000
C. Photobase	Mosaic
D. Mapping order	2
E. Field Mapping scale	1:20,000
F. Field Mapping	
Started	1968
Completed	1975
G. Soil Survey Status	Maintenance needed

Digital Soil Survey

A. Date survey digitized	1998
B. SSURGO base map	VT Orthos (SPM)
C. SSURGO Digitizing Scale	1:20,000
D. Date of SSURGO Certification	1999

2. Quality of the Existing Soil Survey

Published Soil Survey

Soil names and descriptions were approved in 1976. Unless otherwise stated, statements in the published soil survey refer to conditions in the soil survey area in 1976. The soil maps were map finished using overlays of compiled soil maps, drainage, and cultural features.

Soil Maps

Soil maps in the published soil survey are no longer certified for any official uses. Officially certified soil maps derived from SSURGO data are available on: 1) the Web Soil Survey, and 2) the Soil Data Mart.

Taxonomic and Map Unit Names and Descriptions

The taxonomic and map unit names and descriptions do not meet current standards. Most of the taxonomic units no longer classify correctly because they are based on an outdated edition of Soil Taxonomy. The composition of the map units is poorly described. The map unit use paragraphs do not meet the needs of users.

List of Map Unit Concerns by MLRA – see legend below for concerns for individual map units

MLRA 142

- 142-A. The description of stoniness and/or rockiness for this unit is out of date. The degree of stoniness appears to be inaccurate, based on observations made during field office site visits.
- 142-FX. Consociations of shallow soils may be complexes with moderately deep or very shallow series.
- 142-H. Fresh water marsh map units (and other units with this note) may contain significant areas of subaqueous soils.
- 142-IN. Map unit description indicates a very high percentage of inclusions (generally 30% or more).
- 142-L. Map units of Miscellaneous Land Types need refinement/updates. Some of these could be combined, while others could be mapped using soil series now. They have poor interpretative value.
- 142-O. This broadly defined organic soil unit was mapped throughout county across mesic and frigid temperature zones. There are no series identified, and very few interpretations are available.
- 142-SA. St. Albans series appears to cover more than one soil series, based on depth to bedrock range from 6 inches to greater than 30 inches. Some map units appear to be complexes with the Georgia series.
- 142-SL. Out of date slope classes were used for this map unit. They have poor interpretative value.
- 142-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, some series are mapped only in the mesic region, but are now classified as having a frigid temperature class.
- 142-V. This soil is identified as a Variant. It should be established as new series, correlated with an existing series, or included with other soils on the legend.

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142-W. Carlisle series is not mapped in this MLRA or in MO-12.

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

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

MLRA 143

143-A. The description of stoniness and/or rockiness for this unit is out of date. The degree of stoniness appears to be inaccurate, based on observations made during field office site visits.

143-CRY. High elevation cryic soil temperature soil series and “superspodics” (Humods) – these soil types and catenas were not mapped in county and were included with other soils and map units.

143-F. Several series were classified as having fragipans – concept is no longer valid in county. These soils are now considered to have a densic contact over densic materials.

143-HTC. Map units named after higher Taxonomic classes than series (Borohemists, Fragiaquepts and Haplaquepts, Histic Fluvaquents, Udifluvents, etc.) should be reviewed and established as new series or incorporated into existing series, if possible. They have poor interpretative value.

143-IN. Map unit description indicates a very high percentage of inclusions.

143-O. Terric Medisaprists – unit is mapped throughout county across mesic and frigid temperature zones, no series identified, poor interpretations available.

143-OR3. Several map units appear to be mapped at Order 3 level in many areas, with poor line placement and very large polygon size.

143-SL. Out-of-date or poorly defined slope classes were used – poor interpretative value.

143-SP. One or more of the series in this map unit were classified as Spodosols, but are currently classified within other Orders.

143-SPI. Based on observations made during site visits and other various field work, this Spodosol map unit may include significant mappable areas of frigid Inceptisols.

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

143-T. Several series and map units were mapped throughout county across mesic and frigid temperature zones – should be confined to appropriate temperature zone within county. Need other series on legend to map in other temperature zone areas.

143-W. Carlisle series is not mapped in this MLRA or in MO-12.

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

Map Unit Symbol and Name	Map Unit Issues by MLRA-Concern Number (see above)					
AuA AU GRES LOAMY FINE SAND, 0 TO 6 PERCENT SLOPES	142-T	142-IN	143-T	143-SL	142-SL	
BeB BELGRADE SILT LOAM, 2 TO 8 PERCENT SLOPES	142-SL	142-IN				
BeC BELGRADE SILT LOAM, 8 TO 15 PERCENT SLOPES	142-IN					
Bg BINGHAMVILLE SILT LOAM	142-SL	142-IN	142-Z			
Br BIRDSALL SILT LOAM	142-SL					
BxC BUXTON SILT LOAM, 8 TO 15 PERCENT SLOPES	142-T	142-IN	143-T			

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BxD BUXTON SILT LOAM, 15 TO 25 PERCENT SLOPES		142-T	142-IN	143-T			
BxE BUXTON SILT LOAM, 25 TO 45 PERCENT SLOPES		142-T	142-IN	143-T			
CaA CABOT STONY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES		143-F	143-IN	143-A			
CaB CABOT STONY FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES		143-F	143-IN	143-A			
CbA CABOT EXTREMELY STONY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES		143-F	143-IN	143-A			
CbB CABOT EXTREMELY STONY FINE SANDY LOAM, 3 TO 15 PERCENT SLOPES		143-F	143-SL	143-IN	143-A		
Ce CARLISLE MUCK		142-W	142-T	142-SL	143-T		
CoB COLTON GRAVELLY LOAMY SAND, 2 TO 8 PERCENT SLOPES		142-T	143-T	143-SL	143-IN		
CoC COLTON GRAVELLY LOAMY SAND, 8 TO 15 PERCENT SLOPES		142-T	143-T	143-SL	143-IN		
CoD COLTON GRAVELLY LOAMY SAND, 15 TO 25 PERCENT SLOPES		142-T	143-T	143-SL	143-IN		
CoE COLTON GRAVELLY LOAMY SAND, 25 TO 60 PERCENT SLOPES		142-T	143-T	143-SL	143-IN		
CpB COPAKE FINE SANDY LOAM, 2 TO 8 PERCENT SLOPES		142-SL	142-IN				
Cv COVINGTON CLAY		142-SL	142-IN				
DeB DEERFIELD LOAMY FINE SAND, 0 TO 8 PERCENT SLOPES		142-T	143-T				
DeC DEERFIELD LOAMY FINE SAND, 8 TO 15 PERCENT SLOPES		142-T	142-IN	143-T			
EdA ELDRIDGE LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES		142-IN					
EdB ELDRIDGE LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES		142-IN					
EdC ELDRIDGE LOAMY FINE SAND, 8 TO 15 PERCENT SLOPES		142-IN					
EnA ENOSBURG LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES		142-IN					
EnB ENOSBURG LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES		142-IN					
FaB FARMINGTON LOAM, VERY ROCKY, 3 TO 8 PERCENT SLOPES		142-FX	142-IN				
FaC FARMINGTON LOAM, VERY ROCKY, 8 TO 15 PERCENT SLOPES		142-FX	142-IN				
FmC FARMINGTON-ROCK OUTCROP COMPLEX, 6 TO 15 PERCENT SLOPES		142-SL					
FmD FARMINGTON-ROCK OUTCROP COMPLEX, 15 TO 60 PERCENT SLOPES		142-SL					

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GeA GEORGIA STONY LOAM, 0 TO 3 PERCENT SLOPES		142-IN	142-A				
GeB GEORGIA STONY LOAM, 3 TO 8 PERCENT SLOPES		142-IN	142-A				
GeC GEORGIA STONY LOAM, 8 TO 15 PERCENT SLOPES		142-IN	142-A				
GrB GEORGIA EXTREMELY STONY LOAM, 0 TO 8 PERCENT SLOPES		142-IN	142-A				
GrC GEORGIA EXTREMELY STONY LOAM, 8 TO 15 PERCENT SLOPES		142-IN	142-A				
Ha HADLEY SILT LOAM		142-T	142-IN	143-T			
HbA HINESBURG LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES		142-IN					
HbB HINESBURG LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES		142-IN					
HbC HINESBURG LOAMY FINE SAND, 8 TO 15 PERCENT SLOPES		142-IN					
HbD HINESBURG LOAMY FINE SAND, 15 TO 25 PERCENT SLOPES		142-IN					
HbE HINESBURG LOAMY FINE SAND, 25 TO 60 PERCENT SLOPES		142-IN					
KbA KINGSBURY CLAY, 0 TO 3 PERCENT SLOPES		142-IN					
KbB KINGSBURY CLAY, 3 TO 8 PERCENT SLOPES		142-IN					
Le LIMERICK SILT LOAM		142-T	142-IN	143-T			
LoB LORDSTOWN LOAM, ROCKY, 3 TO 8 PERCENT SLOPES		142-IN	142-FX				
LoC LORDSTOWN LOAM, ROCKY, 8 TO 15 PERCENT SLOPES		142-IN	142-Y	142-FX			
LoD LORDSTOWN LOAM, ROCKY, 15 TO 25 PERCENT SLOPES		142-IN	142-Y	142-FX			
LrC LORDSTOWN-ROCK OUTCROP COMPLEX, 5 TO 15 PERCENT SLOPES		142-SL	142-Y				
LrD LORDSTOWN-ROCK OUTCROP COMPLEX, 15 TO 25 PERCENT SLOPES		142-Y					
LrE LORDSTOWN-ROCK OUTCROP COMPLEX, 25 TO 60 PERCENT SLOPES		142-Y					
Ly LYONS STONY LOAM		142-SL	142-A				
Ma MARSH		142-L	142-H				
MeA MASSENA STONY LOAM, 0 TO 3 PERCENT SLOPES		142-IN	142-A				
MeB MASSENA STONY LOAM, 3 TO 8 PERCENT SLOPES		142-IN	142-A				
MnA MASSENA EXTREMELY STONY LOAM, 0 TO 6 PERCENT SLOPES		142-IN	142-A				
MsA MISSISQUOI LOAMY SAND, 0 TO 3 PERCENT SLOPES		142-T	143-T	143-Y			

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MsB MISSISQUOI LOAMY SAND, 3 TO 8 PERCENT SLOPES		142-T	143-T	143-Y			
MsC MISSISQUOI LOAMY SAND, 8 TO 15 PERCENT SLOPES		142-T	143-T	143-Y			
MsD MISSISQUOI LOAMY SAND, 15 TO 25 PERCENT SLOPES		142-T	143-T	143-Y			
MsE MISSISQUOI LOAMY SAND, 25 TO 60 PERCENT SLOPES		142-T	143-T	143-Y			
MuB MUNSON SILT LOAM, 3 TO 8 PERCENT SLOPES		142-IN					
MuC MUNSON SILT LOAM, 8 TO 15 PERCENT SLOPES		142-IN					
Od ONDAWA VARIANT SILT LOAM		142-T	142-V	142-IN	143-T		
Pa PEACHAM STONY SOILS		143-F	143-SL	143-IN	143-A		
PeB PERU STONY FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES		143-SPX	143-F	143-IN	143-SPI	143-A	
PeC PERU STONY FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES		143-SPX	143-F	143-IN	143-SPI	143-A	
PeD PERU STONY FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES		143-SPX	143-F	143-IN	143-SPI	143-A	
PrC PERU EXTREMELY STONY FINE SANDY LOAM, 3 TO 15 PERCENT SLOPES		143-SPX	143-F	143-SL	143-IN	143-SPI	143-A
PrD PERU EXTREMELY STONY FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES		143-SPX	143-F	143-IN	143-SPI	143-A	
Pu PODUNK VARIANT SILT LOAM		142-T	142-V	142-IN	143-T		
RaB RAYNHAM SILT LOAM, 3 TO 8 PERCENT SLOPES							
RoE ROCK OUTCROP-WOODSTOCK COMPLEX, 20 TO 60 PERCENT SLOPES		143-SL	143-OR3	143-CRY			
Ru RUMNEY VARIANT SILT LOAM		142-T	142-V	142-IN	143-T		
SaA ST. ALBANS SLATY LOAM, 0 TO 3 PERCENT SLOPES		142-SA					
SaB ST. ALBANS SLATY LOAM, 3 TO 8 PERCENT SLOPES		142-SA					
SaC ST. ALBANS SLATY LOAM, 8 TO 15 PERCENT SLOPES		142-SA					
SbB ST. ALBANS VERY STONY LOAM, 2 TO 8 PERCENT SLOPES		142-SL	142-SA	142-A			
SbC ST. ALBANS VERY STONY LOAM, 8 TO 15 PERCENT SLOPES		142-SA	142-A				
SbD ST. ALBANS VERY STONY LOAM, 15 TO 25 PERCENT SLOPES		142-SA	142-A				
SbE ST. ALBANS VERY STONY LOAM, 25 TO 60 PERCENT SLOPES		142-SA	142-A				
ScA SCANTIC SILT LOAM, 0 TO 3 PERCENT SLOPES		142-T	142-IN	143-T			

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ScB SCANTIC SILT LOAM, 3 TO 8 PERCENT SLOPES		142-T	142-IN	143-T			
StB STOWE STONY FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES		143-SP	143-F	143-IN	143-SPI	143-A	
StC STOWE STONY FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES		143-SP	143-F	143-IN	143-SPI	143-A	
StD STOWE STONY FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES		143-SP	143-F	143-IN	143-SPI	143-A	
SwC STOWE EXTREMELY STONY FINE SANDY LOAM, 5 TO 15 PERCENT SLOPES		143-SP	143-F	143-SL	143-IN	143-SPI	143-A
SwD STOWE EXTREMELY STONY FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES		143-SP	143-F	143-IN	143-SPI	143-A	
SyE STOWE STONY SOILS, 25 TO 60 PERCENT SLOPES		143-SP	143-F	143-IN	143-SPI	143-A	
Tm TERRIC MEDISAPRISTS		142-SL	142-O	142-IN	143-O	143-HTC	
TwB TUNBRIDGE- WOODSTOCK FINE SANDY LOAMS, VERY ROCKY, 3 TO 8 PERCENT SLOPES		143-CRY	143-SP				
TwC TUNBRIDGE- WOODSTOCK FINE SANDY LOAMS, VERY ROCKY, 8 TO 15 PERCENT SLOPES		143-OR3	143-CRY	143-SP			
TwD TUNBRIDGE- WOODSTOCK FINE SANDY LOAMS, VERY ROCKY, 15 TO 25 PERCENT SLOPES		143-OR3	143-CRY	143-SP			
W WATER							
Wa WALLKILL SILT LOAM		142-SL	142-IN	142-Z			
Wh WAREHAM LOAMY FINE SAND		142-T	142-SL	142-IN	143-T	142-Z	
WrA WESTBURY STONY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES		143-SPX	143-F	143-IN	143-A	143-SPI	
WrB WESTBURY STONY FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES		143-SPX	143-F	143-IN	143-A	143-SPI	
WrC WESTBURY STONY FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES		143-SPX	143-F	143-IN	143-A	143-SPI	
WsA WINDSOR LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES		142-T	143-T				
WsB WINDSOR LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES		142-T	143-T				
WsC WINDSOR LOAMY FINE SAND, 8 TO 15 PERCENT SLOPES		142-T	143-T				
WsD WINDSOR LOAMY FINE SAND, 15 TO 25 PERCENT SLOPES		142-T	143-T				
WsE WINDSOR LOAMY FINE SAND, 25 TO 60 PERCENT SLOPES		142-T	142-IN	143-T			
Wt WINOOSKI SILT LOAM		142-T	142-SL	142-IN	143-T		
WxC WOODSTOCK-ROCK OUTCROP COMPLEX, 8 TO 15 PERCENT SLOPES		143-SP	143-OR3	143-CRY			
WxD WOODSTOCK-ROCK OUTCROP COMPLEX, 15 TO 25 PERCENT SLOPES		143-SP	143-OR3	143-CRY			

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WxE WOODSTOCK-ROCK OUTCROP COMPLEX, 25 TO 60 PERCENT SLOPES		143-SP	143-OR3	143-CRY			
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Interpretations

Interpretations in the published survey no longer meet the needs of users. The interpretations were approved when the soil survey was correlated. Interpretations developed or revised since correlation are available or are referenced in the Field Office Technical Guide, Section II, Part I, Soils Information, and on the Soil Data Mart.

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.