

**Soil Survey Evaluation for Lamoille 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)	VT015
B. Acres (from NRI)	
Total land acres in the survey area	295,000
Total census water in the survey area	1,600
Total Surface area	296,600
Approximate acres within <b>MLRA 143</b> (as of 1996)	296,600

**Correlation**

A. Correlation date	1979
B. Correlation Amendment Dates	
First	1979
Second	1999

**Initial Soil Survey**

A. Publication date	1981
B. Publication scale	1:20,000
C. Photobase	Orthophoto, USGS
D. Mapping order	2
E. Field Mapping scale	
F. Field Mapping	
Started	1971
Completed	1978
G. Soil Survey Status	Maintenance needed

**Digital Soil Survey**

A. Date survey digitized	1986
B. Digitizing base map	Orthophotos, USGS
C. 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 1979. Unless otherwise stated, statements in the published soil survey refer to conditions in the soil survey area in 1979. 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 Most of the taxonomic units no longer classify correctly because they are based on an outdated edition of Soil Taxonomy.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 many users.

### List of Map Unit Concerns – see legend below for concerns for individual map units MLRA 143 (entire county is in this MLRA)

- 143-A. The description of stoniness and/or rockiness for this unit is out of date.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-F. This series was classified as having a fragipan. The concept is no longer valid in Vermont. This series is now considered to have a densic contact over densic materials.
- 143-H. Fresh water marsh map units (and other units with this note) may contain significant areas of subaqueous soils.
- 143-HTC. Map units named after higher Taxonomic classes than series (Borohemists, Fragiaquepts and Haplaquepts, Histic Fluvaquepts, Udifluvents, etc.) should be reviewed and established as new series or incorporated into existing series, if possible. They have poor interpretative value.
- 143-HUM. “Superspodics” (Humods) – these soil types and catena were not mapped in county. Areas of these soils were incorporated into other series and map units as noted.
- 143-IN. Map unit description indicates a high percentage of inclusions (generally 30% or more).
- 143-OR3. This map unit appears to be mapped at the Order 3 level in many areas, with poor line placement and very large polygon size.
- 143-SL. Out of date slope classes were used for this map unit. They have 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-SPX. This series does not meet current taxonomic classification requirements for Spodosols.
- 143-TAX. Hamlin, Teel, and Walpole series are taxadjuncts because they are considered to be in the frigid temperature regime in county – Range in Characteristics for each soil should be reviewed and soils should be established as new series or incorporated into existing series.
- 143-UD. This unit is an undifferentiated unit. However, there may be significant interpretive and morphological differences between the major soils to justify separating them into consociations.

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143-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.

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

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

Map symbol and Map unit name	Map Unit Issues by MLRA-Concern Number (see above)				
	143-SPX	143-SL			
AdB Adams loamy fine sand, 2 to 8 percent slopes	143-SPX	143-SL			
AdC Adams loamy fine sand, 8 to 15 percent slopes	143-SPX				
AdD Adams loamy fine sand, 15 to 25 percent slopes	143-SPX				
AdE Adams loamy fine sand, 25 to 50 percent slopes	143-SPX				
AeC Adams-Adams variant loamy fine sands, rocky, 8 to 15 percent slopes	143-SPX	143-V			
AeD Adams-Adams variant loamy fine sands, rocky, 15 to 25 percent slopes	143-SPX	143-V			
AeE Adams-Adams variant loamy fine sands, rocky, 25 to 50 percent slopes	143-SPX	143-V			
AgB Allagash very fine sandy loam, 2 to 8 percent slopes	143-SL				
BeB Berkshire fine sandy loam, 3 to 8 percent slopes					
BeC Berkshire fine sandy loam, 8 to 15 percent slopes					
BeD Berkshire fine sandy loam, 15 to 25 percent slopes	143-OR3				
BkB Berkshire very stony fine sandy loam, 3 to 8 percent slopes	143-HUM	143-A			
BkC Berkshire very stony fine sandy loam, 8 to 15 percent slopes	143-HUM	143-A			
BkD Berkshire very stony fine sandy loam, 15 to 25 percent slopes	143-HUM	143-A			
BrB Berkshire-Tunbridge fine sandy loams, rocky, 3 to 8 percent slopes	143-HUM				
BrC Berkshire-Tunbridge fine sandy loams, rocky, 8 to 15 percent slopes	143-HUM				
BrD Berkshire-Tunbridge fine sandy loams, rocky, 15 to 25 percent slopes	143-HUM				
BtE Berkshire and Marlow soils, 25 to 50 percent slopes	143-HUM	143-IN	143-UD		
BuB Boothbay silt loam, 3 to 8 percent slopes	143-IN	143-Y			
BuC Boothbay silt loam, 8 to 15 percent slopes	143-Y				
BuD Boothbay silt loam, 15 to 25 percent slopes	143-IN	143-Y			
Bx Borochemists, deep	143-HTC				
By Borochemists, moderately deep over loamy substratum	143-HTC				
CoB Colton-Duxbury complex, 2 to 8 percent slopes	143-IN	143-SL			
CoC Colton-Duxbury complex, 8 to 15 percent slopes	143-IN				
CoD Colton-Duxbury complex, 15 to 25 percent slopes	143-IN				
CoE Colton-Duxbury complex, 25 to 50 percent slopes	143-IN				
CrB Croghan loamy fine sand, 2 to 8 percent slopes	143-SL				
FrB Fragiaquepts and Haplaquepts, 0 to 8 percent slopes	143-HTC	143-SL	143-UD		
Ha Hamlin silt loam	143-TAX				
Hs Histic Fluvaquents, frequently flooded	143-HTC	143-H			
Le Limerick variant silt loam	143-V				
LoE Londonderry-Stratton complex, 25 to 60 percent slopes	143-SP	143-HUM	143-OR3	143-IN	
LyB Lyman-Tunbridge fine sandy loams, very rocky, 3 to 8 percent slopes	143-HUM				
LyC Lyman-Tunbridge fine sandy loams, very rocky, 8 to 15 percent slopes	143-HUM				
LyD Lyman-Tunbridge fine sandy loams, very rocky, 15 to 25 percent	143-HUM	143-OR3			

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slopes					
LyE Lyman-Tunbridge fine sandy loams, very rocky, 25 to 60 percent slopes	143-HUM	143-OR3			
MaB Marlow fine sandy loam, 3 to 8 percent slopes	143-F	143-SPX			
MaC Marlow fine sandy loam, 8 to 15 percent slopes	143-F	143-SPX			
MaD Marlow fine sandy loam, 15 to 25 percent slopes	143-F	143-SPX			
MrB Marlow very stony fine sandy loam, 3 to 8 percent slopes	143-F	143-SPX	143-HUM	143-A	
MrC Marlow very stony fine sandy loam, 8 to 15 percent slopes	143-F	143-SPX	143-HUM	143-OR3	143-A
MrD Marlow very stony fine sandy loam, 15 to 25 percent slopes	143-F	143-SPX	143-HUM	143-OR3	143-A
On Ondawa fine sandy loam	143-IN				
PaA Peacham stony muck, 0 to 5 percent slopes	143-F	143-SL	143-IN	143-A	
PeB Peru fine sandy loam, 3 to 8 percent slopes	143-F	143-IN			
PeC Peru fine sandy loam, 8 to 15 percent slopes	143-F				
PeD Peru fine sandy loam, 15 to 25 percent slopes	143-F	143-IN			
PfB Peru very stony fine sandy loam, 3 to 8 percent slopes	143-F	143-HUM	143-A		
PfC Peru very stony fine sandy loam, 8 to 15 percent slopes	143-F	143-HUM	143-A		
PfD Peru very stony fine sandy loam, 15 to 25 percent slopes	143-F	143-HUM	143-IN	143-A	
Po Podunk fine sandy loam	143-IN				
PtB Potsdam silt loam, 3 to 8 percent slopes	143-F	143-IN	143-Y		
PtC Potsdam silt loam, 8 to 15 percent slopes	143-F	143-IN	143-Y		
PtD Potsdam silt loam, 15 to 25 percent slopes	143-F	143-Y			
RkE Ricker peat, very rocky, 15 to 80 percent slopes	143-SL	143-HUM	143-OR3		
Ru Rumney fine sandy loam	143-IN				
SaB Salmon very fine sandy loam, 3 to 8 percent slopes					
SaB2 Salmon very fine sandy loam, 3 to 8 percent slopes, eroded					
SaC Salmon very fine sandy loam, 8 to 15 percent slopes					
SaC2 Salmon very fine sandy loam, 8 to 15 percent slopes, eroded					
SaD Salmon very fine sandy loam, 15 to 25 percent slopes					
SaD2 Salmon very fine sandy loam, 15 to 25 percent slopes, eroded					
SaE2 Salmon very fine sandy loam, 25 to 50 percent slopes, eroded					
SdC Salmon variant-Salmon very fine sandy loams, rocky, 8 to 15 percent slopes	143-V				
SdD Salmon variant-Salmon very fine sandy loams, rocky, 15 to 25 percent slopes	143-V				
SdE Salmon variant-Salmon very fine sandy loams, rocky, 25 to 50 percent slopes	143-V				
SeD Scantic variant bouldery silt loam, 8 to 25 percent slopes	143-V	143-SL	143-A		
SeE Scantic variant bouldery silt loam, 25 to 50 percent slopes	143-V	143-A			
Sr Searsport muck	143-IN	143-Z			
StC Stratton-Londonderry complex, 8 to 25 percent slopes	143-SP	143-SL	143-HUM		
SwA Swanville silt loam, 0 to 6 percent slopes	143-SL	143-IN	143-Z		
Te Teel silt loam	143-TAX				
TuB Tunbridge-Lyman fine sandy loams, rocky, 3 to 8 percent slopes	143-HUM				
TuC Tunbridge-Lyman fine sandy loams, rocky, 8 to 15 percent slopes	143-HUM				
TuD Tunbridge-Lyman fine sandy loams, rocky, 15 to 25 percent slopes	143-HUM	143-OR3			
TuE Tunbridge-Lyman fine sandy loams, rocky, 25 to 60 percent slopes	143-HUM	143-OR3			

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Ud Udifluvents, frequently flooded		143-HTC				
W Water						
WaA Walpole fine sandy loam, 0 to 6 percent slopes		143-TAX	143-SL			

### **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.