

Forest Value Groups (VT)

Franklin County, Vermont

[These ratings are based on the report "Forest Value Groups and Forest Soil Potential Study for Vermont Soils", revised December 12, 2003, by the USDA-NRCS. This report is available in the Statewide folder under Soils Information in Section II of the Vermont electronic Field Office Technical Guide (eFOTG). Website www.nrcs.usda.gov/technical/efotg/]

Map symbol	Soil map unit name	Vermont Forest Value Group	Relative value
AuA	Au Gres loamy fine sand, 0 to 6 percent slopes	5	51
BeB	Belgrade silt loam, 2 to 8 percent slopes	3	74
BeC	Belgrade silt loam, 8 to 15 percent slopes	3	74
Bg	Binghamville silt loam	6	31
Br	Birdsall silt loam	7	0
BxC	Buxton silt loam, 8 to 15 percent slopes	4	63
BxD	Buxton silt loam, 15 to 25 percent slopes	5	51
BxE	Buxton silt loam, 25 to 45 percent slopes	5	51
CaA	Cabot stony fine sandy loam, 0 to 3 percent slopes	5	51
CaB	Cabot stony fine sandy loam, 3 to 8 percent slopes	5	51
CbA	Cabot extremely stony fine sandy loam, 0 to 3 percent slopes	6	31
CbB	Cabot extremely stony fine sandy loam, 3 to 15 percent slopes	6	31
Ce	Carlisle muck	7	0
CoB	Colton gravelly loamy sand, 2 to 8 percent slopes	2	83
CoC	Colton gravelly loamy sand, 8 to 15 percent slopes	2	83
CoD	Colton gravelly loamy sand, 15 to 25 percent slopes	3	74
CoE	Colton gravelly loamy sand, 25 to 60 percent slopes	3	74
CpB	Copake fine sandy loam, 2 to 8 percent slopes	1	100
Cv	Covington clay	6	31
DeB	Deerfield loamy fine sand, 0 to 8 percent slopes	2	83
DeC	Deerfield loamy fine sand, 8 to 15 percent slopes	2	83
EdA	Eldridge loamy fine sand, 0 to 3 percent slopes	1	100
EdB	Eldridge loamy fine sand, 3 to 8 percent slopes	1	100
EdC	Eldridge loamy fine sand, 8 to 15 percent slopes	1	100
EnA	Enosburg loamy fine sand, 0 to 3 percent slopes	5	51
EnB	Enosburg loamy fine sand, 3 to 8 percent slopes	5	51
FaB	Farmington loam, very rocky, 3 to 8 percent slopes	6	31
FaC	Farmington loam, very rocky, 8 to 15 percent slopes	6	31
FmC	Farmington-Rock outcrop complex, 6 to 15 percent slopes	6	31
FmD	Farmington-Rock outcrop complex, 15 to 60 percent slopes	6	31
GeA	Georgia stony loam, 0 to 3 percent slopes	3	74
GeB	Georgia stony loam, 3 to 8 percent slopes	3	74
GeC	Georgia stony loam, 8 to 15 percent slopes	3	74
GrB	Georgia extremely stony loam, 0 to 8 percent slopes	4	63
GrC	Georgia extremely stony loam, 8 to 15 percent slopes	4	63
Ha	Hadley silt loam	1	100
HbA	Hinesburg loamy fine sand, 0 to 3 percent slopes	1	100
HbB	Hinesburg loamy fine sand, 3 to 8 percent slopes	1	100
HbC	Hinesburg loamy fine sand, 8 to 15 percent slopes	1	100
HbD	Hinesburg loamy fine sand, 15 to 25 percent slopes	2	83
HbE	Hinesburg loamy fine sand, 25 to 60 percent slopes	3	74
KbA	Kingsbury clay, 0 to 3 percent slopes	5	51
KbB	Kingsbury clay, 3 to 8 percent slopes	5	51
Le	Limerick silt loam	6	31

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Map symbol	Soil map unit name	Vermont Forest Value Group	Relative value
LoB	Lordstown loam, rocky, 3 to 8 percent slopes	1	100
LoC	Lordstown loam, rocky, 8 to 15 percent slopes	1	100
LoD	Lordstown loam, rocky, 15 to 25 percent slopes	2	83
LrC	Lordstown-Rock outcrop complex, 5 to 15 percent slopes	6	31
LrD	Lordstown-Rock outcrop complex, 15 to 25 percent slopes	6	31
LrE	Lordstown-Rock outcrop complex, 25 to 60 percent slopes	6	31
Ly	Lyons stony loam	6	31
Ma	Marsh	7	0
MeA	Massena stony loam, 0 to 3 percent slopes	4	63
MeB	Massena stony loam, 3 to 8 percent slopes	4	63
MnA	Massena extremely stony loam, 0 to 6 percent slopes	5	51
MsA	Missisquoi loamy sand, 0 to 3 percent slopes	2	83
MsB	Missisquoi loamy sand, 3 to 8 percent slopes	2	83
MsC	Missisquoi loamy sand, 8 to 15 percent slopes	2	83
MsD	Missisquoi loamy sand, 15 to 25 percent slopes	3	74
MsE	Missisquoi loamy sand, 25 to 60 percent slopes	3	74
MuB	Munson silt loam, 3 to 8 percent slopes	5	51
MuC	Munson silt loam, 8 to 15 percent slopes	5	51
Od	Ondawa variant silt loam	4	63
Pa	Peacham stony soils	7	0
PeB	Peru stony fine sandy loam, 3 to 8 percent slopes	2	83
PeC	Peru stony fine sandy loam, 8 to 15 percent slopes	2	83
PeD	Peru stony fine sandy loam, 15 to 25 percent slopes	3	74
PrC	Peru extremely stony fine sandy loam, 3 to 15 percent slopes	4	63
PrD	Peru extremely stony fine sandy loam, 15 to 25 percent slopes	5	51
Pu	Podunk variant silt loam	2	83
RaB	Raynham silt loam, 3 to 8 percent slopes	6	31
RoE	Rock outcrop-Woodstock complex, 20 to 60 percent slopes	7	0
Ru	Rumney variant silt loam	6	31
SaA	St. Albans slaty loam, 0 to 3 percent slopes	3	74
SaB	St. Albans slaty loam, 3 to 8 percent slopes	3	74
SaC	St. Albans slaty loam, 8 to 15 percent slopes	3	74
SbB	St. Albans very stony loam, 2 to 8 percent slopes	3	74
SbC	St. Albans very stony loam, 8 to 15 percent slopes	3	74
SbD	St. Albans very stony loam, 15 to 25 percent slopes	4	63
SbE	St. Albans very stony loam, 25 to 60 percent slopes	5	51
ScA	Scantic silt loam, 0 to 3 percent slopes	6	31
ScB	Scantic silt loam, 3 to 8 percent slopes	6	31
StB	Stowe stony fine sandy loam, 3 to 8 percent slopes	1	100
StC	Stowe stony fine sandy loam, 8 to 15 percent slopes	1	100
StD	Stowe stony fine sandy loam, 15 to 25 percent slopes	2	83
SwC	Stowe extremely stony fine sandy loam, 5 to 15 percent slopes	2	83
SwD	Stowe extremely stony fine sandy loam, 15 to 25 percent slopes	3	74
SyE	Stowe stony soils, 25 to 60 percent slopes	3	74
Tm	Terric Medisaprists	7	0
TwB	Tunbridge-Woodstock fine sandy loams, very rocky, 3 to 8 percent slopes	4	63

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TwC	Tunbridge-Woodstock fine sandy loams, very rocky, 8 to 15 percent slopes	4	63
TwD	Tunbridge-Woodstock fine sandy loams, very rocky, 15 to 25 percent slopes	5	51
W	Water	7	0
Wa	Walkkill silt loam	7	0
Wh	Wareham loamy fine sand	5	51
WrA	Westbury stony fine sandy loam, 0 to 3 percent slopes	4	63
WrB	Westbury stony fine sandy loam, 3 to 8 percent slopes	4	63
WrC	Westbury stony fine sandy loam, 8 to 15 percent slopes	4	63
WsA	Windsor loamy fine sand, 0 to 3 percent slopes	2	83
WsB	Windsor loamy fine sand, 3 to 8 percent slopes	2	83
WsC	Windsor loamy fine sand, 8 to 15 percent slopes	2	83
WsD	Windsor loamy fine sand, 15 to 25 percent slopes	3	74
WsE	Windsor loamy fine sand, 25 to 60 percent slopes	3	74
Wt	Winooski silt loam	1	100
WxC	Woodstock-Rock outcrop complex, 8 to 15 percent slopes	6	31
WxD	Woodstock-Rock outcrop complex, 15 to 25 percent slopes	6	31
WxE	Woodstock-Rock outcrop complex, 25 to 60 percent slopes	6	31

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This table shows, for the map units in this survey area, the Vermont Forest Value Groups and relative values for woodland production and management. These groups are intended to provide information for planners and decision makers about the relative potential of individual soils for woodland management. Forest Value Group ratings do not constitute a recommendation for land use.

The potential for producing and harvesting timber is very high in Forest Value Group 1, high in Forest Value Group 2, moderate in Forest Value Group 3, moderately low in Forest Value Group 4, low in Forest Value Group 5, and very low in Forest Value Group 6. Forest Value Group 7 has very limited potential for commercial forestry.

The Forest Value Groups are based on index numbers called "relative values." These numbers do not represent dollar net returns for a given forestry use. They do not show the absolute profitability of woodland production on a specific map unit, but they can be used to compare the potential profitability of woodland production on different soils.

A forest soil potential study led by the Natural Resources Conservation Service (NRCS) and detailed in the report "Forest Value Groups and Forest Soil Potential Study for Vermont Soils" formed the basis for the development of the Forest Value Groups and relative values. This study determined the relative costs associated with overcoming various soil limitations as applied to woodland productivity and management. The criteria used in the study include the following:

- Sugar maple was used as the indicator species for northern hardwoods on most of the map units.
- For soils that formed in glaciofluvial deposits (generally sandy and/or gravelly soils), eastern white pine, which tends to dominate northern hardwoods, was used as the indicator species.
- Several hundred map units were considered to have very limited potential for commercial forestry. These map units were given a relative value of 0 and were assigned to Forest Value Group 7. When necessary, the potential of these map units should be evaluated on a case-by-case basis. The map units with a relative value of 0 are made up primarily of:

Organic soils (Histosols);
Soils with a cryic soil temperature regime (generally above an elevation of 2,500 to 3,000 feet);
Miscellaneous areas (e.g., urban land, quarries, sand pits, and gravel pits);
Very poorly drained mineral soils; and
Soils with slopes of more than 60 percent.

- The forest soil potential ratings are based on the integration of numerous data derived from the literature and from the technical expertise of specialists in the field of silviculture in Vermont. Some of these data are estimates. Potential yields on specific map units are examples of estimates used in the report. The forest soil potential ratings are only as accurate as the estimates used to derive them. The estimates and the ratings are subject to change as more precise data become available.
- Monetary benefits and costs associated with potential yields and corrective measures can change as a result of inflation, fluctuations in market value, or technological advances. Such changes can affect the forest soil potential ratings and thereby warrant an update of the study.

The Forest Value Group designations can be used for many resource management activities, including:

- Design and implementation of Forest Land Evaluation and Site Assessment (FLESA) systems;
- Evaluation of primary and secondary forest soils under criterion 9C of Vermont's Land Use and Development Law, Act 250;
- Rating of forest soils for appraisal under Vermont's Use Value Program of Agricultural and Forest Land;
- Assessment of forest soils by private land trusts, landowners, bankers, and real estate agents; and
- Broad resource planning by State agencies and town and regional planning commissions.

With the exception of broad planning activities, onsite investigations are recommended when the information in this table is used. These investigations are needed:

- to identify variations in site conditions (e.g., stoniness, aspect, rock outcrops, and wetness) within a map unit delineation that may affect tree growth;
- to identify areas within a map unit that may be unsuitable for timber harvesting because they have slopes of 25 to 60 percent;
- to identify the unique landscape characteristics of a map unit delineation. For example, there are numerous delineations of Lyman-Tunbridge complex, 3 to 8 percent slopes, throughout the State. In some instances, however, these delineations may be inaccessible because of irregular slope patterns or because of large streams and drainageways. These site characteristics can result in small, inefficient tract sizes; may hamper the use of logging equipment; and can make a site poorly suited to forestry without expensive land shaping.