

Forest Value Groups (VT)

Orange 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
AgA	Agawam fine sandy loam, 0 to 3 percent slopes	2	83
AgB	Agawam fine sandy loam, 3 to 8 percent slopes	2	83
AgC	Agawam fine sandy loam, 8 to 15 percent slopes	2	83
AgD	Agawam fine sandy loam, 15 to 25 percent slopes	3	74
AgE	Agawam fine sandy loam, 25 to 50 percent slopes	4	63
BeB	Belgrade silt loam, 0 to 8 percent slopes	3	74
BeC	Belgrade silt loam, 8 to 15 percent slopes	3	74
BeD	Belgrade silt loam, 15 to 25 percent slopes	3	74
Bp	Pits, borrow	7	0
BuB	Buckland stony loam, 3 to 8 percent slopes	3	74
BuC	Buckland stony loam, 8 to 15 percent slopes	3	74
BuD	Buckland stony loam, 15 to 25 percent slopes	3	74
BvC	Buckland very stony loam, 8 to 25 percent slopes	4	63
BwE	Buckland soils, 25 to 50 percent slopes	5	51
CaB	Cabot stony silt loam, 0 to 8 percent slopes	5	51
CaC	Cabot stony silt loam, 8 to 15 percent slopes	5	51
CaD	Cabot stony silt loam, 15 to 25 percent slopes	5	51
CbB	Cabot very stony silt loam, 3 to 15 percent slopes	5	51
CbD	Cabot very stony silt loam, 15 to 25 percent slopes	6	31
Cm	Pits, copper mine-Dumps, mine complex	7	0
CoB	Colrain stony fine sandy loam, 3 to 8 percent slopes	1	100
CoC	Colrain stony fine sandy loam, 8 to 15 percent slopes	1	100
CoD	Colrain stony fine sandy loam, 15 to 25 percent slopes	2	83
CsD	Colrain very stony fine sandy loam, 8 to 25 percent slopes	3	74
CsE	Colrain very stony fine sandy loam, 25 to 50 percent slopes	3	74
CxD	Colrain extremely stony fine sandy loam, 8 to 25 percent slopes	3	74
CxE	Colrain extremely stony fine sandy loam, 25 to 50 percent slopes	4	63
Gp	Gravel pits	7	0
Ha	Hadley very fine sandy loam	1	100
HdB	Hartland silt loam, 0 to 8 percent slopes	1	100
HdC	Hartland silt loam, 8 to 15 percent slopes	1	100
HdD	Hartland silt loam, 15 to 25 percent slopes	2	83
HdE	Hartland silt loam, 25 to 50 percent slopes	3	74
Le	Limerick very fine sandy loam	6	31
MeA	Merrimac fine sandy loam, 0 to 3 percent slopes	2	83
MeB	Merrimac fine sandy loam, 3 to 8 percent slopes	2	83
MeC	Merrimac fine sandy loam, 8 to 15 percent slopes	2	83
MeD	Merrimac fine sandy loam, 15 to 25 percent slopes	3	74
MeE	Merrimac fine sandy loam, 25 to 50 percent slopes	3	74
Ml	Udorthents	7	0
Mu	Muck	7	0
NnB	Ninigret fine sandy loam, 0 to 8 percent slopes	1	100
NnC	Ninigret fine sandy loam, 8 to 15 percent slopes	1	100
Pc	Peacham soils	7	0

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Map symbol	Soil map unit name	Vermont Forest Value Group	Relative value
PoC	Pomfret stony loamy fine sand, 8 to 15 percent slopes	4	63
PoD	Pomfret stony loamy fine sand, 15 to 25 percent slopes	4	63
PsD	Pomfret very stony loamy fine sand, 8 to 25 percent slopes	5	51
PtE	Pomfret soils, 25 to 50 percent slopes	5	51
Qu	Pits, quarry-Dumps, mine complex	7	0
Ra	Raynham variant silt loam	6	31
Ro	Rock outcrop	7	0
Sa	Saco mucky silt loam	7	0
SLF	Dumps, sanitary landfill	7	0
SoB	Stowe stony fine sandy loam, 3 to 8 percent slopes	1	100
SoC	Stowe stony fine sandy loam, 8 to 15 percent slopes	1	100
SoD	Stowe stony fine sandy loam, 15 to 25 percent slopes	2	83
StD	Stowe very stony fine sandy loam, 8 to 25 percent slopes	3	74
SwE	Stowe soils, 25 to 50 percent slopes	3	74
TbB	Tunbridge-Woodstock rocky fine sandy loams, 3 to 8 percent slopes	4	63
TbC	Tunbridge-Woodstock rocky fine sandy loams, 8 to 15 percent slopes	4	63
TbD	Tunbridge-Woodstock rocky fine sandy loams, 15 to 25 percent slopes	4	63
TrD	Tunbridge-Woodstock very rocky fine sandy loams, 8 to 25 percent slopes	5	51
TwE	Tunbridge-Woodstock complex, 25 to 50 percent slopes	5	51
VeB	Vershire-Glover rocky loams, 3 to 8 percent slopes	3	74
VeC	Vershire-Glover rocky loams, 8 to 15 percent slopes	3	74
VeD	Vershire-Glover rocky loams, 15 to 25 percent slopes	3	74
VgD	Vershire-Glover-Rock outcrop complex, 8 to 25 percent slopes	6	31
VhE	Vershire-Glover complex, 25 to 50 percent slopes	6	31
W	Water	7	0
Wa	Walpole fine sandy loam	5	51
WnB	Windsor loamy fine sand, 0 to 8 percent slopes	2	83
WnD	Windsor loamy fine sand, 8 to 25 percent slopes	3	74
WnE	Windsor loamy fine sand, 25 to 50 percent slopes	3	74
Wo	Winooski very fine sandy loam	1	100

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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.