VMC Forest Health Plot Codes

Site Tree Codes	
Plot ID	Unique plot identifer: site, watershed, elevation, and elevation modifier
Year	Year of data collection
Point	Point = subplot number 1-4
Tree	Unique tree number
Spp	Species code (<300 are softwoods, >300 are hardwoods)
CurDBH	Diameter at breast height in 10ths of inches (102=10.2")
Hdist	Horizontal distance from point center to tree in 10ths of feet
Azim	Azimuth from point center to tree (magnetic north)
Crat	Crown ratio (ratio between live crown and tree height, in 5% categories)
Cclass	Crown class (1=open grown, 2=dominant, 3=codominant, 4=intermediate, 5=suppressed/overtopped)
Сехр	Crown exposure
Cpos	Crown position
Theight	Tree height
AgeDBH	Tree age at DBH
CmpBA	Basal area
BAF	Prism used for basal area (10 factor prism =10)
Cdens	Crown density
Cdieb	Crown dieback
Transp	Transparency of foliage
Cdiam	Crown diameter (feet)
CDia90	Crown diameter at 90 degrees (feet)
Loc1	Location of damage 1 (0=no damage, 1=roots, 2=roots, stump & lower bole, 3=lower bole, 4=lower & upper boled, 5=upper bole, 6=crownstem, 7=branches, 8=buds & shoots, 9=foliage
Dam1	Damage type 1 (1=canker, 2=indicator of decay, 3=open wound, 4=resinosis, 5=cracks & seams, 11=broken root or bole, 12=brooms, 13=broken or dead roots, 20=vines, 21=dead top, 22=broken or dead, 23=broowm, 24=damaged buds, foliage or shoots, 25=discoloration of foliage
Sev1	Severity of damage 1
Notes	Severity of damage 1
INOTES	
Point Data codes	
Plot ID	Unique plot identifer: site, watershed, elevation, and elevation modifier
Year	Year of data collection
Point	Point = subplot number 1-4
SICor	Slope Correction (if slope between point 1 and other points >5%, use correction factor chart to add distance)
%Slope	Percent slope
Aspt	Aspect
TerrP	Terrain position (1=top or upper slope, 2=midslope, 3=bench, 4=lower slope, 5=flatland, 6=bottomland, 7=wet bottomland)
SbCdl	Subplot condition class (1 only, as long as just one condition)
%Moss	Percent of microplot ground covered with moss
%Fern	Percent of microplot ground covered with ferns
%Herb	Percent of microplot ground covered with non-woody plants
%Shrub	Percent of microplot ground covered with shrubs
%Seed	Percent of microplot ground covered with shabs Percent of microplot ground covered with tree seedlings
%Lich	Percent of microplot ground covered with lichens
%Vines	Percent of microplot ground covered with vines
Notes	
Condition Class Codes	
Plot ID	Unique plot identifer: site, watershed, elevation, and elevation modifier
Year	Year of data collection
CondClass	Condition Class
LndUse	Land use (1=forested timberland, 12= (forest reserve)
ForType	Forest type (110=balsam fir, 130=red spruce/balsam fir, 810=sugar maple/beech/yellow birch, 840=red maple/northern hardwoods, 890=mixed northern hardwoods
StndOrgn	Stand origin (1=natural, 2=softwood planted, 3=hardwood planted)
StndSize	Stand size (1=sawtimber, 2=poletimber, 3=sapling/seedling, 4=nonstocked, 5=sawtimber old growth)
Dist1	Disturbance type 1 (distubance of at least 1 acre in size within last 9 years) (see list below)
DistYr	Disturbance year
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VMC Forest Health Plot Codes

Dist2	Disturbance type 2
Dist2Yr	Disturbance year
Dist3	Disturbance type 3
Dist3Yr	Disturbance year
StAge	Stand Age
Torra Deta Onder	
Tree Data Codes	
Year	Year of data collection
Watershed	Watershed BR=browns river, sb=stevensville brook, rb=ranch brook
Elevation (feet)	
Elevation Modifier	
Point Number	1=center subplot, 2= north, 3=southeast, 4=southwest
Tree Number	
Species Code	see below
DBH	
Azimuth	
Horizontal Distance from Center Point	
Tree Status	1=live, 2=dead
	Crown class (1=open grown, 2=dominant, 3=codominant, 4=intermediate,
Crown Class	5=suppressed/overtopped)
Uncompacted Crown Ratio	Raio of of live crown length to total tree length (5% categories)
Sapling Vigor	1=healthy, 2=good, 3=poor
Crown Density	5% categories from 05 to 99
Crown Dieback	0% categories from 05 to 99
Transparency of Foliage	0% categories from 05 to 99
Landing of Damage 4	0=none, 1=roots and stump, 2=roots, stump and lower bole, 3=lower bole, 4=lower and
Location of Damage 1	upper bole, 5=upper bole, 6=crownstem, 7=branches, 8=buds and shoots, 9=foliage
Damage 1	codes 01-31
Severity of Damage 1	codes 0=none, 02=20-2909=90-99
Landing of Damage 0	0=none, 1=roots and stump, 2=roots, stump and lower bole, 3=lower bole, 4=lower and
Location of Damage 2	upper bole, 5=upper bole, 6=crownstem, 7=branches, 8=buds and shoots, 9=foliage
Damage 2	codes 01-31
Severity of Damage 2	codes 0=none, 02=20-2909=90-99
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Location of Damage 2	0=none, 1=roots and stump, 2=roots, stump and lower bole, 3=lower bole, 4=lower and
Location of Damage 3 Damage 3	upper bole, 5=upper bole, 6=crownstem, 7=branches, 8=buds and shoots, 9=foliage codes 01-31
<u> </u>	
Severity of Damage 3	codes 0=none, 02=20-2909=90-99
Cause of Death	10=insect, 20=disease, 30=fire, 40=animal, 50=weather, 60=vegetation (suppression,
Cause of Death	vines), 70=unknown, 80=human-caused, 90=physical (hit by fallen tree)
Notes Other	observations/clarifications
Study Site	Mount Mansfield, Lye Brook
Counter	
I rea ()rightation	Order of trees on each plot for use in data collection
Tree Orientation	1
Tree Orientation	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns
Tree Offendation	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed
	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east
Plot ID	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area)
Plot ID Lean Angle	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean)
Plot ID Lean Angle Total Length	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top
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Plot ID Lean Angle Total Length Actual Length	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated &
Plot ID Lean Angle Total Length	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated
Plot ID Lean Angle Total Length Actual Length Length Method	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class Compacted Crown Ratio	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics Portion of tree supporting live foliage as a percent of actual tree height
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class Compacted Crown Ratio Crown Exposure	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics Portion of tree supporting live foliage as a percent of actual tree height
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class Compacted Crown Ratio Crown Exposure Crown Light	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics Portion of tree supporting live foliage as a percent of actual tree height N/A N/A
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Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class Compacted Crown Ratio Crown Exposure Crown Light Crown Position	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics Portion of tree supporting live foliage as a percent of actual tree height N/A N/A 1=superstory, 2=overstory, 3=understory, 4=open grown 1=live, 2=ingrowth on microplot, 3=ingrowth on subplot, 4=outgrowth, 5=dead, 7=cut,
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class Compacted Crown Ratio Crown Exposure Crown Light Crown Position Tree History	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics Portion of tree supporting live foliage as a percent of actual tree height N/A N/A 1=superstory, 2=overstory, 3=understory, 4=open grown 1=live, 2=ingrowth on microplot, 3=ingrowth on subplot, 4=outgrowth, 5=dead, 7=cut, 9=missed
Plot ID Lean Angle Total Length Actual Length Length Method %Rotten Missing Decay Class Compacted Crown Ratio Crown Exposure Crown Light Crown Position Tree History Crown Density 1992	Study Site (abbr)+watershed+elevation+plot number: MMBR=Mount Mansfield Browns River Watershed (west slope), MMSB=Mount Mansfield Stevensville Brook Watershed (west slope), MMRB or MMRV=Mount Mansfield Ranch Brook (Valley) Watershed (east slope), LB or LBA=Lye Brook (Area) 0=standing (less than 45 degree lean), 1=down (more than 45 degrees of lean) Tree height including dead or broken top Tree height present 1=total and actual length measured with instrument, 2=total length visually estimated & acutal length measured with an instrument, 3=total and actual length visually estimated percentage of rotten and missing cubic-foot volume to the nearest 1 percent using a Table Code ranging from 1(not decayed) to 5 using a Table of characteristics Portion of tree supporting live foliage as a percent of actual tree height N/A N/A 1=superstory, 2=overstory, 3=understory, 4=open grown 1=live, 2=ingrowth on microplot, 3=ingrowth on subplot, 4=outgrowth, 5=dead, 7=cut, 9=missed N/A
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VMC Forest Health Plot Codes

Cause of Damage 1	N/A
Cause of Damage 2	N/A
Cause of Damage 3	N/A
Field0	N/A
Species code	012=balsam fir
	095=black spruce
	097=red spruce
	129=white pine
	261=hemlock
	315=striped maple
	316=red maple
	318=sugar maple
	319=mountain maple
	371=yellow birch
	375=paper birch
	379=gray birch
	531=beech
	541=white ash
	746=quaking aspen
	761=pin cherry
	762=black cherry 833=northern red oak
	935=mountain ash 951=basswood
Crown class	
Crown class	1=open grown 2=dominant
	3=codominant
	4=intermediate
	5=suppress/overtopped
Sapling vigor	1=healthy
Caping vigor	2=moderate decline
	3=poor health
Cause of death	10=insect
Caase of acain	20=disease
	30=fire
	40=animal
	50=weather
	6-=vegetation (suppressed, competition)
	70=unknown
	80=human-caused
	90=physical
Mortality year	Estimated year that tree died
Decay class	1-5 (see chart)
Total length	tree height include estimate of what is missing(feet)
Actual length	tree height of what is there(feet)
Length method	1=total and actual lengths measured with clinometer & tape
	2=total length visually estimated, actual length is measured
	3=total and actual lenghts are visually estimated
Disturbance	0=none
	1=harvest
	2=commercial thinning
	3=selective cutting and highgrading
	4=other cutting
	5=site preparation
	6=artificial regeneration on existing forest
	7=artificial regeneration on nonforest
	8=prescribed burning
	9=other silvicultural
	10=natural reversion on nonforest
	11=disease
	12=insects
	13=weather
	14=wildfire
	15=grazing
	16=other

