

# PLOT 5A-4

TREE #	SPECIES	x	y	ingrowthyr	censinyr	deathyr	censoryr	1931	1937	1942	1947	1954	1961	1965	1973	1979	1984	1989	1994
1	RO	12.8	58.5		1931			4.3	6.0	7.0	8.2	9.3	10.7	11.1	12.1	13.0	13.6	14.3	15.1
8	RM	9.7	11.5		1931			3.1	4.0	5.0	5.9	6.7	8.0	8.2	9.1	10.1	10.5	11.2	11.7
40	RO	22.9	5.2		1931			3.2	4.1	4.8	6.0	7.3	8.6	9.1	10.1	11.1	11.8	12.8	13.8
45	RO	42.2	21.0		1931			5.1	6.3	8.3	10.2	12.5	15.0	15.6	17.3	18.7	20.0	21.3	22.5
47	RO	36.9	24.6		1931			2.7	3.6	4.4	5.6	6.5	7.4	7.8	8.6	9.2	9.7	10.2	10.8
48	BG	41.5	25.6		1931			1.6	2.2	2.5	3.9	4.2	3.6	3.8	4.2	4.5	4.7	5.1	5.3
49	RM	41.2	32.4		1931			1.7	2.2	2.9	3.3	3.5	3.6	3.8	4.3	4.9	5.1	5.2	5.2
54	SH	70.6	64.1		1931			2.8	3.8	4.4	5.0	5.3	5.5	5.6	5.7	5.8	5.8	5.8	5.8
57	RO	55.8	44.5		1931			4.7	6.1	6.9	8.6	9.9	11.1	11.6	12.5	13.1	13.6	14.0	14.5
60	SM	56.8	40.2		1931			1.1	1.5	1.6	1.9	1.9	2.1	2.2	2.5	2.7	3.0	3.0	3.1
68	BG	70.6	7.8		1931			1.8	2.3	2.6	2.9	3.0	3.2	3.3	3.6	3.6	3.7	3.8	3.9
72	BB	44.5	3.4		1931			1.4	2.1	3.0	3.9	4.7	5.3	5.5	5.9	6.2	6.3	6.5	6.5
73	BG	45.4	10.6		1931			1.6	1.8	2.2	2.6	3.1	3.5	3.7	4.2	4.5	4.8	5.1	5.3
74	BG	35.0	8.9		1931			1.7	2.2	2.4	2.7	2.9	3.1	3.2	3.5	3.9	4.0	4.5	4.7
88	BB	39.1	50.4		1931			1.3	2.2	3.2	3.9	4.6	5.2	5.5	6.2	6.7	6.9	7.3	7.6
98	RM	30.7	54.3	1973											1.7	2.1	2.3	2.5	2.7
104	BG	9.8	5.0	1961									1.5	2.0	2.3	2.6	2.9	3.5	3.8
105	BG	33.6	35.2	1979												1.9	2.2	2.7	3.0
106	BG	14.0	62.0	1979												2.0	2.2	2.3	2.5
108	BG	11.7	26.4	1979												1.9	2.1	2.5	2.7
109	BG	37.6	30.0	1984													1.5	1.6	1.7
110	BG	38.9	41.2	1984													1.5	1.7	1.9
111	BG	11.6	38.8	1989														1.7	2.1
112	RM	27.5	44.7	1994															1.5
114	BG	31.6	8.4	1994															1.1
116	BG	42.2	47.6	1994															1.3
117	RM	41.5	31.6	1994															1.3

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1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2011	2012	2013	2014	2015	2016	1998	1999	2001
15.2	15.4	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.7	16.8	16.9	17.0	18.3	17.3	17.6	17.6	17.8	17.9	18.0	18.1	90	92	81
11.9	12.0	12.1	12.3	12.4	12.5	12.5	12.6	12.8	12.9	12.9	13.0	13.0	13.3	13.3	13.3	13.4	13.6	13.6	13.6	13.7	56	66	76
14.0	14.2	14.3	14.5	14.6	14.7	15.0	15.2	15.3	15.5	15.6	15.8	16.0	16.3	16.4	16.7	16.8	16.9	17.1	17.2	17.3	81	84	83
22.9	23.0	23.2	23.4	23.6	23.8	24.0	24.0	24.3	24.5	24.7	25.0	25.1	25.7	25.5	26.4	26.1	26.1	26.1	26.3	26.6	99	103	92
10.9	11.1	11.2	11.3	11.4	11.6	11.8	12.0	12.2	12.4	12.5	12.6	12.8	13.1	13.3	13.5	13.7	14.1	14.1	14.2	14.5	95	98	92
5.4	5.4	5.4	5.5	5.5	5.6	5.6	5.7	5.8	5.8	5.8	5.8	5.8	6.0	6.0	5.9	5.9	5.9	6.0	5.9	5.9	44	44	44
5.2	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.5	44	44	44
5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	5.9	5.8	5.7	5.7	5.7	5.8	5.8	5.7	5.7	51	36	47
14.6	14.7	14.8	14.8	14.9	15.1	15.2	15.3	15.4	15.4	15.5	15.6	15.7	15.9	16.1	16.2	16.2	16.3	16.5	16.6	16.7	89	92	84
3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.4	3.5	3.5	3.6	3.7	3.7	3.8	29	27	27
3.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.2	4.2	4.3	4.3	4.4	4.4	33	36	31
6.6	6.7	6.7	6.8	6.8	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.2	7.1	7.1	7.1	7.1	7.2	7.3	7.2	62	57	57
5.3	5.4	5.4	5.5	5.6	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.8	5.8	5.9	6.0	5.9	6.0	6.0	6.0	5.9	44	48	46
4.8	4.8	5.0	5.0	5.0	5.1	5.1	5.3	5.4	5.5	5.4	5.4	5.5	5.6	5.6	5.7	5.8	5.8	5.9	5.9	5.9	44		47
7.7	7.8	8.0	8.1	8.2	8.3	8.3	8.5	8.5	8.5	8.6	8.7	8.8	9.1	9.1	9.3	9.4	9.4	9.4	9.6	9.7	66	71	64
2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.2	3.3	3.4	3.4	3.5	3.5	3.7	3.7	3.8	3.9	3.9	4.0	4.0	4.0	30	30	34
3.9	4.0	4.1	4.2	4.3	4.3	4.3	4.4	4.5	4.6	4.6	4.7	4.8	5.0	4.9	5.0	5.1	5.1	5.1	5.1	5.1	29	30	32
3.2	3.3	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.5	4.6	4.7	4.8	5.0	5.1	5.1	5.1	35	36	37
2.6	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.2	3.4	3.5	3.6	3.7	3.9	4.0	4.0	4.1	4.1	4.2	30	20	32
2.8	2.9	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.6	3.6	3.7	3.7	3.8	3.9	4.0	4.1	4.2	4.2	4.2	4.3	19	19	19
1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	19	18	19
1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.6	2.6	21	23	21
2.2	2.3	2.3	2.4	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.2	3.2	3.4	3.6	3.6	3.7	3.8	3.8	3.8	3.9	19	21	22
1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.8	14	17	21
1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.5	1.5	10	12	11
1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.8	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	14	15	15
1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	15	14	13

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2007	1931	1937	1942	1947	1954	1961	1965	1973	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
74	d	c/d	c	d	d	c	c/d	c	c	d	d		d			d	d	d	c	c		c	c
65	d	c/d	c	c	c/d	s	c/d	c	c	c	c/d		d			d	d	d	c	c		d	d
81	c	c	c	d	c/d	d	d	d	d	d	d		d			d	d	d	d	d		d	c
75	d	d	d	d	d	d	d	d	d	d	d		d			d	d	d	d	d		d	d
84	d	d	d	c	c/d	c	c/d	c	c	c	c/d		d			d	c	d	d	d		d	c
44	s	s	s	s	s	s	s	s	s	s	s		s			s	s	s	s	s		s	s
49	d	c	s	s	s	s	s	s	s	s	s		s			s	s	s	s	s		d	s
31	c	c	c	s	s	s	s	s	s	s	s		s			s	s	s		s		s	s
75	d	d	d	d	d	d	d	d	d	d	d		d			d	d	d		d		d	c
30	s	s	s	s	s	s	s	s	s	s	s		s			s	s	s		s		s	s
31	s	s	s	s	s	s	s	s	s	s	s		s			s	s	s	s	s		s	s
59	s	s	s	s	s	s	s	s	s	s	i		s			s	s	s	s	s		s	s
45	s	s	s	s	s	s	s	s	s	s	s		s			s	s	s	s	s		s	s
44	s	s	s	s	s	s	s	s	s	s	s		s			s	s	s	s	s		s	s
61	c	c	c	d	c/d	s	s	s	s	s	i		c/d			c	c	c	s	c		c	s
38								s	s	s	s		s			s	s	s	s	s		s	s
39								s	s	s	s		s			s	s	s	s	s		s	s
34									s	s	s		s			s	s	s	s	s		s	s
34									s	s	s		s			s	s	s	s	s		s	s
24									s	s	s		s			s	s	s	s	s		s	s
17										s	s		s			s	s	s	s	s		s	s
23										s	s		s			s	s	s	s	s		s	s
28											s		s			s	s	s	s	s		s	s
30													s			s	s	s	s	s		s	s
12													s			s	s	s	s	s		s	s
18													s			s	s	s	s	s		s	s
16													s			s	s	s	s	s		s	s

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2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	1931	1937	1942
d	c		c	c	c	c	c	d	d	d			
d	c		c	c	c	c	c	c	c	c			
d	c		c	c	c	c	c	d	c	c			
d	c		c	c	c	d	d	d	d	d			
d	c		c	d	c	c	c	d	d	d			
s	s		s	s	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
d	c		c	d	c	d	d/c	d	c	c			
s	s		s	i	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
s	s		s	i	s	i	i	i	i	i			
s	s		s	i	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
c	s		s	s	s	s	i	i	i	i			
s	s		s	i	i	i	s	i	i	i			
s	s		s	s	s	s	s	s	s	s			
s	s		s	i	s	s	s	i	s	i			
s	s		s	s	i	i	s	i	s	s			
s	s		s	s	i	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
s	s		s	i	i	i	s	i	s	i			
s	s		s	i	i	i	s	i	i	i			
s	s		s	s	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			
s	s		s	s	s	s	s	s	s	s			

Plot 5a-4 Mount Misery control. Rectangular plot established in 1931, size is 4372 square feet (approx. 66 feet by 66 feet)  
Latitude- 41 24 09.16951 W  
Longitude- 74 01 10.16197 N  
Tree number- unique number assigned to each tree and painted on trunk bark  
Species- RO (red oak, *Quercus rubra*), CO (chestnut oak, *Quercus prinus*), SO (scarlet oak, *Quercus coccinea*),  
Coordinates- measured in feet from plot corner  
Ingrowthyr- year when ingrowth was first recorded  
Censinyr- left censored yr (present in plot when first sampled)  
Deathyr- year when death was first recorded  
Censoryr- right censoring (e.g., cut down)  
Diameter at breast height- trunk diameter in inches rounded to the nearest tenth. Measured with diameter tape at  
Height- vertical distance in feet from ground to live top as measured with clinometer or laser rangefinder  
Canopy class- d= dominant, c= codominant, i= intermediate, s= suppressed (or "o" for overtopped)

· 66 feet).

BO (black oak, *Quercus velutina*), WO (white oak, *Quercus alba*), SM (sugar maple, *Acer saccharum*), RM (red

painted line on all live trees 0.5 inches or greater dbh at line, generally after July 15 of each year to represent enc

maple, *Acer rubrum* ), MW (moosewood, *Acer pensylvanicum* ), BB (black birch, *Betula lenta* ), GB (gray birch, *Be*

d of year measurement, sometimes measured as late as spring of following year (4/19/32, 10/27/37, 9/29/42, 11/20

*Betula populifolia* ), YB (yellow birch, *Betula allagheniensis* ), PH (pignut hickory, *Carya glabra* ), SH (shagbark hickory

10/47, 11/8/54, 9/6/61, 9/21/65, 8/3/73, 8/6/79, 7/2/84, 8/24/89, 7/13/94, 7/12/95, 8/1/96, 8/8/97, 7/27/98, 7/16/99, 4/2



y, *Carya ovata* ), BA (basswood, *Tilia americana* ), CH (American chestnut, *Castanea dentata* ), HM (eastern heml

26/01, 8/2/01, 8/12/02, ?/03, ?/04, 6/5/06, 1/07, ?/07, 4/10/08 (height), 12/09, ?/10, 11/9/11, ?/12, 8/29/13, 9/9/14)

ock, *Tsuga canadensis*), SB (shadbush, *Amelanchier canadensis*), WA (white ash, *Fraxinus americana*), BG (bla

ick gum, *Nyssa sylvatica* ), BE (American beech, *Fagus grandifolia* ), BC (black cherry, *Prunus serotina* ), DW (doç

wood, *Cornus florida*), AL (alder, *Alnus rugosa*)

### Mount Misery 5a-5 Thinned

TREE #	SPECIES	coordinates		DBH (in)			CC			Notes	
		x	y	2013	2014	2015	2013	2014	2015	2014	2015
1	RO	12.8	58.5	17.8	17.9	18.0	c	d	d		
8	RM	9.7	11.5	13.6	13.6	13.6	c	c	c		
40	RO	22.9	5.2	16.9	17.1	17.2	c	d	c		
45	RO	42.2	21.0	26.1	26.1	26.3	d	d	d		
47	RO	36.9	24.6	14.1	14.1	14.2	c	d	d		
48	BG	41.5	25.6	5.9	6.0	5.9	s	s	s	broken top	
49	RM	41.2	32.4	5.6	5.6	5.6	s	s	s		not healthy, has growth
54	SH	70.6	64.1	5.8	5.8	5.7	s	s	s		broken top
57	RO	55.8	44.5	16.3	16.5	16.6	d/c	d	c		
60	SM	56.8	40.2	3.6	3.7	3.7	s	s	s		
68	BG	70.6	7.8	4.3	4.3	4.4	s	s	s		
72	BB	44.5	3.4	7.1	7.2	7.3	i	i	i		broken top
73	BG	45.4	10.6	6.0	6.0	6.0	s	s	s		broken 5 feet up
74	BG	35.0	8.9	5.8	5.9	5.9	s	s	s		
88	BB	39.1	50.4	9.4	9.4	9.6	i	i	i		
98	RM	30.7	54.3	3.9	4.0	4.0	s	i	i		
104	BG	9.8	5.0	5.1	5.1	5.1	s	s	s		
105	BG	33.6	35.2	5.0	5.1	5.1	s	i	s		
106	BG	14.0	62.0	4.0	4.1	4.1	s	i	s		
108	BG	11.7	26.4	4.2	4.2	4.2	s	s	s		
109	BG	37.6	30.0	2.2	2.2	2.1	s	s	s		
110	BG	38.9	41.2	2.6	2.6	2.6	s	s	s		
111	BG	11.6	38.8	3.8	3.8	3.8	s	i	s		
112	RM	27.5	44.7	2.6	2.7	2.7	s	i	i		
114	BG	31.6	8.4	1.5	1.6	1.5	s	s	s		
116	BG	42.2	47.6	2.1	2.2	2.1	s	s	s		

**Mount Misery 5a-5 Thinned**

		coordinates		DBH (in)			CC			Notes	
TREE #	SPECIES	x	y	2013	2014	2015	2013	2014	2015	2014	2015
117	RM	41.5	31.6	1.4	1.4	1.4	s	s	s		broken top barely alive

TREE #	SPP	x	y	DBH	NE		SE		NW		SW		Notes
					< 1/2 m	1/2-1 m	< 1/2 m	1/2-1 m	< 1/2 m	1/2-1 m	< 1/2 m	1/2-1 m	
1	RO	12.8	58.5	18.0									
40	RO	22.9	5.2	17.2									
45	RO	42.2	21.0	26.3									
47	RO	36.9	24.6	14.2									
57	RO	55.8	44.5	16.6									

0: No Smooth Patch detected or trace amounts (P:less than 1% cover)

1: 1-25% cover of smooth patch

2: 26-50% cover of smooth patch

3: 51-75% cover of smooth patch

4: 76-100% cover of smooth patch